HUMAN BEHAVIOR COURSE

BLOCK I SYLLABUS

FUNDAMENTALS AND DEVELOPMENT

Academic Year 2004

HUMAN BEHAVIOR COURSE 2004
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HUMAN BEHAVIOR COURSE 2004
DATES

JANUARY 8 (THURSDAY)	COURSE STARTS
FEBRUARY 19 (THURSDAY)	**MANDATORY**: FIRST SMALL GROUP
MARCH 4 (THURSDAY)	BLOCK ONE EXAM
DATE TBD	**MANDATORY**: JAMISON LECTURE ON SUICIDE & MOOD DISORDERS
APRIL 2 (FRIDAY)	LAST DAY TO DECLARE INTENT & TOPIC FOR PAR PROJECT
APRIL 2 (FRIDAY)	**MANDATORY**: SECOND SMALL GROUP
APRIL 7 (WEDNESDAY)	BLOCK TWO EXAM
APRIL 9 (FRIDAY)	**MANDATORY**: THIRD SMALL GROUP
APRIL 19 (WEDNESDAY)	**MANDATORY**: TORREY & FRESE LECTURE ON SCHIZOPHRENIA
APRIL 26 (MONDAY)	PAR PROJECT DUE (BONUS POINTS)
APRIL 26 (MONDAY)	BLOCK THREE EXAM
APRIL 26 (MONDAY)	**MANDATORY**: FOURTH SMALL GROUP
MAY 5 (WEDNESDAY)	BLOCK FOUR & FINAL EXAM
MAY 15 (FRIDAY)	FINAL COURSE GRADES POSTED

HUMAN BEHAVIOR COURSE 2004
OBJECTIVES

MAIN OBJECTIVE. Introduce second-year medical students to the theory and practice of psychiatry and biopsychosocial patient care.

LEARNING OBJECTIVES.
Students should achieve the following objectives during the Human Behavior Course:

1. Learn the phenomenology and range of normal and disordered behavior, emotions, and relationships over the human life span.

2. Grasp the concept and application of the biopsychosocial model to general medical and psychiatric care.

3. Learn and practice how to create biopsychosocial formulations and management plans for patients.

4. Understand and discuss the impact of various predisposing, protective, precipitating, perpetuating, and therapeutic factors on the natural history of psychiatric disorders.

5. Rehearse prioritized differential diagnoses based on appropriate nomenclature, diagnostic categories, and criteria using patient vignettes or actual patient histories.

6. Develop a foundation of knowledge and experience in psychiatry that is applicable to medical practice and a framework for new knowledge obtained using various life-long learning strategies.

HUMAN BEHAVIOR COURSE 2004
ATTENDANCE

ABSENCES. To be excused from any mandatory activity (e.g., small groups, examinations) you must notify Dr. Engel in writing AT LEAST 24 HOURS prior to your absence, emergencies excepted.

ALL SMALL GROUPS ARE *MANDATORY*. They will meet in rooms and labs as assigned. Please see "Small Group Assignments" section of the syllabus for details. The small group sessions may be found in the main class schedule (course hours 15, 22, 27, and 36).

SOME LECTURES ARE *MANDATORY*. Some of the course lectures are mandatory because guest lecturers, patients, or family members of patients are volunteering their time (and in some cases traveling great distances) to speak to the class. **Mandatory lectures are bolded in the main class schedule**. To learn more about the lecturers, see the "Lecturers" section of this syllabus.

HUMAN BEHAVIOR COURSE 2004
TEXT & REQUIRED READINGS

REQUIRED COURSE READINGS ARE FROM:
Cohen BJ. *Theory and Practice of Psychiatry*. Oxford University Press, New York, NY; 2003. Students should review the assigned readings prior to attending lectures. This book is lent to each student for the duration of the course. Please don't mark in these books because they will be reused.

THE REFERENCE TEXT FOR THE COURSE IS:
Hales RE, Yudofsky SC, Editors. *Textbook of Clinical Psychiatry*, 4th Edition. American Psychiatric Press, Washington, DC; 2002. This book has been issued to students and comes with a CD-ROM version of the complete *Diagnostic & Statistical Manual, Fourth Edition (Text Revision)* (DSM-IV-TR). DSM-IV-TR is the principal diagnostic manual used in clinical psychiatry. Neither these two books are required reading for the Human Behavior Course. However they are useful reference texts that provide broader and more comprehensive coverage of psychiatry than the Cohen book.

NOTE: The Hales & Yudofsky chapter on normal development (chapter 2) is *required* reading for the normal development lectures in the course that are delivered by Dr. Gemelli. This is the only exception to the rule that Hales & Yudofsky is not required reading for the course.

HUMAN BEHAVIOR COURSE 2004
SCHEDULE

Lectures are in Lecture Room D unless otherwise noted.

PART I.			FUNDAMENTALS.	LECTURER
1.	8 Jan THU	0730-0745	Course Introduction READ: Introductory Parts of the Syllabus	Engel
2.	8 Jan THU	0745-0820	Global Burden of Psychiatric Disorders READ: Syllabus	Engel
3.	8 Jan THU	0830-0920	Neurobiology of Psychiatric Disorders One READ: Syllabus & Cohen Ch 4	Lacy
4.	15 Jan THU	0730-0820	Neurobiology of Psychiatric Disorders Two READ: Syllabus & Cohen Ch 4	Lacy

PART II.			DEVELOPMENT.	LECTURER
5.	15 Jan THU	0830-0920	Suicide READ: Cohen Ch 16	Engel
6.	22 Jan THU	0730-0820	Infancy & Toddlerhood READ: Hales & Yudofsky Ch 2:67-105	Gemelli
7.	22 Jan THU	0830-0920	Infancy & Toddlerhood READ: Hales & Yudofsky Ch 2:67-105	Gemelli
8.	29 Jan THU	0730-0820	Childhood READ: Hales & Yudofsky Ch 2:67-105	Gemelli
9.	29 Jan THU	0830-0920	Childhood READ: Hales & Yudofsky Ch 2:67-105	Gemelli
10.	5 Feb THU	0730-0820	Adolescence READ: Hales & Yudofsky Ch 2:67-105	Gemelli
11.	5 Feb THU	0830-0920	Adolescence READ: Hales & Yudofsky Ch 2:67-105	Gemelli

PART III.			ASSESSMENT	LECTURER
12.	12 Feb THU	0730-0820	Psychiatric Evaluation, Diagnosis, & Formulation READ: Cohen Ch 1, 2, 3	Engel
13.	12 Feb THU	0830-0920	Adult Development READ: Syllabus only	Privitera
14.	17 Feb TUE	0730-0820	Violence READ: Cohen Ch 17	Engel
15.	19 Feb THU	0730-0920	DIAGNOSIS & FORMULATION ONE TOPIC: Introduction to Diagnosis & Formulation READ: Syllabus only	Faculty

PART IV.			MAJOR DISORDERS.	LECTURER
16.	26 Feb THU	0730-0820	Delirium READ: Cohen Ch 5	Engel
17.	26 Feb THU	0830-0920	Dementia READ: Cohen Ch 6	Engel

BLOCK 1 EXAM		THURSDAY MARCH 4 0830-0920 [COVERS LECTURE HOURS 2-15]

PART IV.			MAJOR DISORDERS.	LECTURER
18.	**29 Mar MON**	**0730-0820**	**Mood Disorders One** **READ: Cohen Ch 7**	**Jamison**
19.	**29 Mar MON**	**0830-0920**	**Mood Disorders Two** **READ: Cohen Ch 7**	**Jamison**
20.	31 Mar WED	0730-0820	Mood Disorders Three Read: Cohen Ch 7	Osuch
21.	31 Mar WED	0830-0920	Anxiety Disorders One READ: Cohen Ch 9	Benedek
22.	2 Apr FRI	0730-0920	DIAGNOSIS & FORMULATION II TOPIC: Gender-Related Issues READ: Syllabus only	Faculty
23.	5 Apr MON	0930-1020	Anxiety Disorders Two READ: Cohen Ch 9	Engel

24.	5 Apr MON	1030-1120	Substance Use Disorders READ: Ch. 12	Engel

BLOCK 2 EXAM		**WEDNESDAY 7 APRIL 0730-0820 [COVERS LECTURE HOURS 16-24]**

PART IV.			**MAJOR DISORDERS (Continued).**	**LECTURER**
25.	7 Apr WED	0830-0920	Somatoform & Related Disorders READ: Ch 13	Engel
26.	7 Apr WED	0930-1020	Reactions to Stress & Trauma READ: Cohen Ch 9:273-280; Ch 7:Table 7-6; & Ch 14	Osuch
27.	9 Apr FRI	0730-0920	DIAGNOSIS & FORMULATION III TOPIC: Social & Cultural Aspects of Psychiatry READ: Ch 7	Faculty
28.	12 Apr MON	0730-0820	Eating Disorders READ: Ch 11	Hall
29.	**12 Apr MON**	**0830-0920**	**Developmental Disorders & Mental Retardation READ: Ch 19 (sections on Pervasive Developmental Disorders & Mental Retardation)**	**Randall Hanson**
30.	14 Apr WED	0930-1020	Childhood Disorders READ: Ch 19 (except for sections on Pervasive Developmental Disorders & Mental Retardation)	Waldrep
31.	14 Apr WED	1030-1120	Personality Disorders: Introduction & Cluster A Disorders READ: Cohen Ch 10	Engel
32.	**19 Apr MON**	**0930-1020**	**Schizophrenia & Psychosis One READ: Cohen Ch 8**	**Torrey Frese**
33.	**19 Apr MON**	**1030-1120**	**Schizophrenia & Psychosis Two READ: Cohen Ch 8**	**Torrey Frese**

PART V.			**THERAPEUTICS.**	**LECTURER**
34.	21 Apr WED	0930-1020	Personality Disorders: Cluster B and Cluster C Disorders READ: Cohen Ch 10	Engel
35.	21 Apr WED	1030-1120	Schizophrenia & Psychosis Three READ: Cohen Ch 8	Engel

BLOCK 3 EXAM		MONDAY 26 APR 0730-0820 [COVERS LECTURE HOURS 25-31]

PART V.			THERAPEUTICS (Continued).	LECTURER
36.	26 Apr MON	0830-1020	DIAGNOSIS & FORMULATION IV TOPIC: The Geriatric Patient READ: Syllabus	Faculty
37.	28 Apr WED	0930-1020	Psychotherapies READ: Ch 18	Ursano
38.	28 Apr WED	1030-1120	Psychotherapies READ: Ch 18	Ursano
39.	3 May MON	0930-1020	Sexual & Gender Identity Disorders READ: 15	Engel

PART VI.			SPECIAL TOPICS.	LECTURER
40.	3 May MON	1030-1120	Forensic Psychiatry READ: Ch 20	Benedek
41.	4 May TUE	0930-1020	Military Psychiatry READ: Syllabus	Holloway
42.	4 May TUE	1030-1120	Comprehensive Review Session	Engel

FINAL EXAM		WEDNESDAY 5 MAY 0730-1030 [COMPREHENSIVE BUT EMPHASIZES LECTURE HOURS 32-42]

HUMAN BEHAVIOR COURSE 2004
GRADING

POSTING OF GRADES. During the course, exam grades will be posted outside Dr. Engel's office, B3066.

EXAM EMPHASIS. Not all topics will receive equal emphasis on examinations. Generally, lecture topics are weighted on the exams in proportion to the amount of class time spent on them. Topics that receive a little more emphasis on exams than one might expect from the amount of course time spent on them include neuropsychiatry, mood disorders, schizophrenia, substance use disorders, disorders resulting from situational stressors, anxiety disorders, suicide and violence. Topics less emphasized on exams than one might expect based on the amount of class time spent on them include development, small groups, personality disorders, and the section on special topics at the end of the course.

CHALLENGES TO EXAM QUESTIONS. Students will have five working days after exam grades are posted to challenge exam questions. Challenges are to be submitted electronically to the class representative, who collates them without editing into a single submission to Dr. Engel (cengel@usuhs.mil).

To successfully challenge an answer to any Human Behavior Course exam question, students must make their case based upon statements from the book, the lectures, and/or the way the question is worded. All course director decisions regarding exam question challenges are final.

EXAMINATIONS.

Block Exams: 120 points (three exams worth 40 points each)

All examinations will be administered in Lecture Room D. The format for all examinations is the same and consists of single-best-answer multiple choice and extended-matching questions.

Final Exam: 72 points

32 points on this examination will address cumulative course content. 40 points will cover the last course block only.

Small Groups (ATTENDANCE MANDATORY): 8 points (four groups worth up to 2 points each)

There are four small group sessions during the course. Any readings assigned for the small groups are testable for exam purposes. Students earn a grade from 0-2 points per small group session. Small group leaders evaluate and grade student participation (absent & unexcused=0; present=1; active in discussions=2). Student concerns or complaints regarding any small group may be addressed by email to Dr. Engel. Except for determinations regarding excused versus unexcused absences, however, small group leader grades are final. Small group evaluations of student performance can be decisive for students on the border between grades.

Bonus Points: 10 points possible

Up to 10 bonus points will be added to your final grade point average **after** letter grade cutoffs have been determined from examination and small group performance. These points can make a major difference in your overall grade. BONUS POINT ACTIVITIES ARE VOLUNTARY and amount to 'extra credit' work. Bonus points can have a significant impact on your final course grade. Bonus points are earned by successfully completing a **Psychiatry Academic Report (PAR)**, as described the corresponding section of the syllabus. Note that the PAR must be completed on time to be eligible for full credit.

FINAL COURSE GRADES.

Final grades will be disseminated to students at the end of the course. The final grade will reflect each exam score, each small group grade, and any bonus points received during the course. If you wish to have us email your final grade to you, please notify Dr. Engel or Jennifer Stecklein at or before the Final Exam.

FINAL COURSE POINT TOTAL (up to 210 points)
Block Exams (up to 120 pts) + Final Exam (up to 72 pts) + Small Group (8 pts) + Bonus Points

Dr. Engel will assign all students a preliminary course letter grade based on your course point total before bonus points are added. The ranges listed below are based on the class grades from previous years and serve as a guideline.

CLASS STANDING RELATIVE THE MEAN IN SD	GRADE
Greater than +1.1 SD from Class Mean	A
Class Mean to + 1.1 SD From Class Mean	B
-1.5 SD to Class Mean	C
-2.0 SD to -1.5 SD from Class Mean	D
Less than -2.0 SD from Class Mean	F

Once the class curve and individual grade cut points have been established, bonus points are added, and the final course point total and grade are determined. Academic Awards will be based on your final course point total that includes your bonus points. A letter grade of "I" (incomplete) will be given for failure to complete required assignments, tests, or the final course evaluation.

Some years, students score very well as a group, leading to an unfairly difficult class curve. To prevent this from occurring, any student with a final course point total of 90% or greater is insured an “A”, 80% or greater at least a “B”, 70% or greater at least a "C", and 65% or greater at least a "D."

ACADEMIC DIFFICULTIES.

What the department will do:

- **After the Block 2 Exam.** Any student with a cumulative point total of less than -2.0 SD who is scoring less than 65% on the first two examinations must meet with Dr. Engel to discuss the situation.
- **After the Block 3 Exam.** Any student with a cumulative point total of less than -2.0 SD who is scoring less than 65% on the first two examinations will be offered a plan of remedial action. The student and the Associate Dean for Student Affairs will be notified of the potential for academic deficiency.

What you can do:

- *Don't* wait for the last minute.
- *Don't* be afraid to ask for assistance.
- *Don’t* take the course lightly. We do everything we can to get students successfully ‘past the finish line’. However, every year four or five people struggle to get a ‘C’ final grade, and one or two students struggle to get a ‘D’ final grade. A small percent of students have failed the course (perhaps one student in every 200 or so that take the course) and must either take it again, complete a PAR after the course is over (getting in the way of spring USMLE exams), and/or have to take an extra clinical psychiatry rotation in the fourth year. Don’t be one of these students!
- *Do* anticipate emerging academic or scheduling problems. Meet with Dr. Engel to prevent them. Dr. Engel maintains an open door policy for students, but ‘drop-in’ visits may sometimes be impossible, so please request an appointment via email ahead of time (cengel@usuhs.mil). Please suggest two or three possible meeting times and wait for Dr. Engel’s reply.
- *Do* Contact Jennifer Stecklein B3066 (295-9799 or 9796 or jstecklein@.usuhs.mil) if you have any trouble contacting Dr. Engel.

DISCIPLINARY ACTIONS.

Any student who does not display consistent seriousness of purpose and effort may be denied a letter grade above a C. Small group facilitator evaluations of student performance during small group sessions can be a decisive factor for students who are on the border between the A/B, B/C, or C/D grades. Dr. Engel reserves the right to change a student's letter grade if there is sufficient evidence of inappropriate, disruptive, or unethical behavior. This includes actions disruptive to other students or to faculty.

HUMAN BEHAVIOR COURSE 2004
PAR

CONCEPT. The Psychiatry Academic Report (PAR) is an optional project that allows you to obtain bonus points toward your final course grade (see 'Grading' section in this syllabus). The objective of the project is to cultivate independent learning skills that will be critical to your continued success as a clinician and to give you a chance to pursue a topic of interest in psychiatry.

WHY DO A PAR? The biggest and most immediate benefit is on the course grade. In past years, 80% of individuals completing a PAR raised their final point total enough to come up one full letter grade for the course. A PAR can also bring departmental visibility to the students producing it. Each year, the student completing the best PAR (determined by department faculty consensus) is invited to present his or her work to the entire National Capital Area Department of Psychiatry Grand Rounds at Walter Reed Army Medical Center. There may be the opportunity for other students to similarly present their work too. This kind of visibility may be a big benefit if a student is considering psychiatry as a career. Lastly, a good PAR can support write-ups required in the third year USUHS psychiatry clerkship.

APPROACH. The PAR is an optional project that students complete individually to receive course bonus points (essentially extra credit points). **Student collaboration on PAR projects is not allowed.** In other words, the PAR is an independent project, not a group project. Any student with an innovative idea for a PAR, i.e., one that deviates from the formats described below, is encouraged to discuss his or her idea with Dr. Engel. **All topics and ideas must receive his approval in advance to be accepted for bonus points**.

SUGGESTED FORMATS. Please double-space all PARs.
Format One (Good for up to 10 bonus points): Conventional Report
This type of PAR is essentially a substantial and relatively conventional report on any topic pertaining to Psychiatry. The standards for Format One PARs are as follows:

1. Title page. Include title, author, date of completion.
2. Abstract. Summarize the paper in 250-400 words.
3. The body of the PAR should contain some appropriate visuals such as pictures, tables, or figures.
4. Length of the overall report excluding references should be 4,500-6,000 words (15-25 double-spaced pages of 12-point text with one inch margins).
5. Clinical case examples are often useful to illustrate points but they are not required.
6. PAR literature citations should emphasize primary articles from the medical or social science literature. Citing textbooks is discouraged, but published review articles are acceptable, and often textbooks can help the student to identify relevant primary literature.
   A. A minimum of 10 and maximum of 30 literature citations is required.
   B. Citations must be formatted in a consistent manner. The recommended format for citations may be found in the "information for authors" posted in the journal *JAMA* (see http://jama.ama-assn.org/info/auinst.html).

Format Two (Good for up to 10 bonus points): Book Report/Review.
Novel or biographical account that focuses on an individual with an apparent psychiatric disorder. Books may address an individual with a major axis I psychiatric disorder such as schizophrenia (many great books of this sort, for example, *Shine* or *A Beautiful Mind*) or an individual with an axis II disorder such as mental retardation or an apparent personality disorder. The resulting book report would be 3,000-4,000 words (10-15 double-spaced pages of 12-point text with one inch margins) and should focus on a specific issue relevant to psychiatry. The student should clearly state the issue they want to develop after reading the book and use 5-10 references from the medical or social sciences literature to support the discussion. Issues of relevance, for example, might include stigma, patient versus clinician perspective of psychiatric disorders, the range of disability associated with psychiatric disorders, or differential diagnosis of a particular psychiatric symptom or sign. **Students should seek course director approval or advice regarding an appropriate book before reading it for the course.** To receive bonus points, the student must read the book during the period of time

encompassing the Human Behavior Course course. Students are not allowed to report on a book they have previously read.

Format Three (Good for up to 5 bonus points each, but students can do up to two for a maximum of 10 total bonus points). Movie Review.
Movies reviews should address a movie that focuses on an individual with an apparent psychiatric disorder. Movies may address an individual with a major axis I psychiatric disorder such as schizophrenia or an individual with an axis II disorder such as mental retardation or an apparent personality disorder. The resulting movie review should be 2,000-3,000 words (7-10 double-spaced pages of 12-point text with one inch margins) and should focus on a specific issue relevant to psychiatry. The student should clearly state the issue they want to develop after reading the book and use up to 5 references from the medical or social sciences literature to support the discussion. Issues of relevance, for example, might include stigma, patient versus clinician perspective of psychiatric disorders, the range of disability associated with psychiatric disorders, or differential diagnosis of a particular psychiatric symptom or sign. **Students should seek course director approval or advice regarding an appropriate movie to review before watching it for the course.** To receive bonus points, the student must watch the movie during the period of time encompassing the Human Behavior Course. Students are not allowed to report on a movie they have previously viewed.

GRADING. Dr. Engel will coordinate Department of Psychiatry faculty reviews of and grades for the completed PARs.

DUE DATES. To receive bonus points, you must submit your topic(s) to Dr. Engel on email (cengel@usuhs.mil) by **COB Friday April 2**. Any student missing this deadline cannot receive bonus points (exceptions to this rule may be made for students who discover late that they are struggling to pass the course – note that this exception will not be extended to people are otherwise passing and decide late that they want to raise their grade). A completed electronic version of the PAR must be submitted to Dr. Engel by **COB Monday April 26** (please note that this is also the date of the block 3 examination, so students are warned not to wait until the last minute to complete the PAR). PARs submitted late but before May 3 will be accepted but cannot receive more than half credit. PARs submitted after COB April 28 will not receive bonus points unless by previous arrangement with Dr. Engel (usually reserved for students struggling to pass the course or students with extenuating personal circumstances that prevent them from meeting the regular deadline).

PLAGIARISM: It is increasingly easy to plagiarize previously written reviews or reports by cutting and pasting material from the World Wide Web and other source material. All PARs are submitted to a web-based service that reviews them for evidence of plagiarism. Any student who has plagiarized all or part of their PAR will be punished to the maximum extent allowed by University policy.

HUMAN BEHAVIOR COURSE 2004
WEB

THE HUMAN BEHAVIOR COURSE WEBSITE IS AT http://cim.usuhs.mil/ps02001/

WEBSITE PURPOSE. The course website is a centralized repository for course materials. Content includes:
1. A homepage with recent course announcements and reminders.
2. A bulletin board for asking questions pertinent to other students.
3. Syllabus materials – for example, notices regarding modifications may be found on the site.
4. Study materials – for example, old exams.
5. Downloadable lecture slides.
6. Class curves, answers to the exams, and responses to student exam challenges.

ACCESSING THE SITE. It is recommended that you access the course website once each week. This will insure you don't miss important course announcements and other developments. Having said that, all course announcements will be sent via email at the same time it is placed on the website. Emails to the students will routinely contain a link to the course website reminding students to log in to the site. If you have any trouble linking to the site, please contact Jennifer Stecklein or Dr. Engel for assistance.

SOME OTHER INTERNET PSYCHIATRY RESOURCES.

These Internet resources may prove useful during the course or in the future. For students planning to complete the Psychiatry Academic Report (PAR) for up to five bonus points at the end of the course, these links may provide useful leads when planning for web-links to sites related to your report. There is also a website for obtaining software compatible with the Palm OS. There are many programs relevant to psychiatry that are designed to run on the students' issued palm devices.

USEFUL SITES FOR RESEARCHING THE PAR BONUS PROJECT.

PubMed.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi

Particularly user-friendly.

Free Medical Journals.com.
http://www.freemedicaljournals.com/

Good for finding full text journal articles and/or abstracts of key articles from the peer-reviewed medical literature.

Evidence-Based Mental Health.
http://www.ebmentalhealth.com

This site covers the quarterly journal, "Evidence-Based Mental Health". The journal summarizes clinically relevant evidence of clinical utility for psychiatrists and other clinicians.

Palm, Inc. Software Site.
http://www.handango.com/

Go to the 'search for software' box, and enter terms like 'psychiatry', 'psychiatrist', 'mental', 'psychology', and 'psychologist' and see what comes up. Lots of inexpensive and often useful software for PDAs. Be sure to check out a shareware program called, "Eliza Pilot Psychologist".

USEFUL SITES FOR MEDICAL STUDENTS LEARNING PSYCHIATRY.

CAUTION! The accuracy of the information found on the web varies from site to site and sometimes from topic to topic within a given site. In short, the sites below are variably quality controlled, so while we endorse their general use, Dr. Engel, Dr. Privitera, and the Department of Psychiatry at USUHS do not "stand behind" the information found on them.

Emergency Psychiatry Service Handbook.
http://www.vh.org/Providers/Lectures/EmergencyMed/Psychiatry/TOC.html
A Virtual Hospital and a University of Iowa Hospitals and Clinics sponsored tool.

US Naval Flight Surgeon's Manual – Psychiatry.
http://www.vnh.org/FSManual/06/SectionTop.html
A Virtual Naval Hospital product is available for 330 page adobe file download called “Aviation Psychiatry Handbook”.

Iowa Family Practice Handbook – Psychiatry.
http://www.vh.org/navigation/vh/topics/adult_provider_psychiatry.html

Internet Mental Health – Psychiatry.
http://www.mentalhealth.com/

Merck Manual – Psychiatry.
http://www.merck.com/pubs/mmanual/section15/sec15.htm

HUMAN BEHAVIOR COURSE 2004
SMALL GROUPS

Small groups are central to the structure of the Human Behavior Course. Small groups meet for four small group sessions (see the "Schedule" or "Dates" sections of this syllabus). All of these small group meetings will take place in the rooms designated below. **SMALL GROUP SESSIONS ARE MANDATORY**.

GROUP	STUDENT NAMES	ROOM NUMBER & STUDENT NAMES
Group A		**Room A2015**
	Adams, Michael Burkhardt, Gabriel Callis, William Damasco, Leo Egloff, Brian George, Jennifer Gray, Jon	Haggerty, Paul Kaesberg, Julie Matthews, Tokunbo Rabens, Clayton Schwalier, Erik Talley, William
Group B		**Room A2052A**
	Adams, Thomas Barker, Patrick Dansie, Chad Faircloth, Ruth Kent, Zachary Lefringhouse, Jason Lynch, Michelle	McArthur, Conshombia Nasir, Javed Odone, James Porsi, Luke Rao, Luigi Ugochukwu, Obinna
Group C		**Room A2052B**
	Afiesimama, Boma Campos, Napoleon Daschbach, Emily Harper, Stephen Ignacio, Patrick Jacobs, Justin Mack, Takman	Moore, Matthew Neiner, James Padlan, Claire Rappe, Jodie Seigh, Mark Tan, Erico
Group D		**Room A2053A**
	Ajao, Michael Barna, Michael Capra, Gregory Gim, Sylvia Harris, Jason Kho, Ellie Lackey, Jeffrey	Maddox, John Martinez-Ross, Juan Palmer, Eldon Quan, Sara Redding, Shawn Shaffer, Brett

GROUP	STUDENT NAMES	ROOM NUMBER & STUDENT NAMES
Group E		**Room A2053B**
	Aldrich, Shelly Barstow, Craig Fasoldt, Jerry Gratrix, Max Jones, Ronald Lanzi, Joseph McArthur, Samuel	Neuffer, Marcus Patel, Shimul Reha, Jeffery Shayegan, Shahrooz Sundell, Zoe Royster, Don
Group F		**Room A2069**
	Allan, Nicholas Baldwin, Allister Capra, Jason Dimmer, Brian Ferguson, Katrina Gray, Kelly Hilton, William	Kitley, Charles Lee, Mary Nijjar, Upneet Paul, Michael Rice, Jason Simpson, Michael
Group G		**Room A2039**
	Angelidis, Matthew Bernzott, Stephanie Carbone, Peter Dirks, Michael Fernelius, Colby Lesperance, Richard Levy, Gary	McGill, Robert McPherson, John Payne, Kathryn Robinson, David Smith, Ryan Wright, Heath
Group H		**Room A2041**
	Arner, David Bode, David Cho, Timothy Downs, John Gregory, Leslie Hobernicht, Susan Lewis, Aaron	Mei, Jian Pederson, Aasta Rodgers, Blake Soto, Adam Tou, Kevin Wells, Nicholas
Group I		**Room A2045**
	Arnett, Gavin Brown, Jamey Cleaves, John Fick, Daryl Gudeman, Suzanne Hunsaker, John Kraus, Gregory	Lewis, Troy Messmer, Caroline Penska, Keith Rodgers, Matthew Stringer, Sarah Treffer, Christine

GROUP	STUDENT NAMES	ROOM NUMBER & STUDENT NAMES
Group J		**Room A2049**
	Arnold, Michael Bryant, Summer Covey, Carlton Flaherty, Kathleen Gregory, Todd Liebig, Jonathan Liu, Scott	Mielcarek, Emily Phinney, Samuel Rogers, Derek Rose, David Summers, Noelle Vojta, Christopher
Group K		**Room A2057**
	Cragin, Douglas Fowler, Elizabeth Gwinn, Barbara Knudson, Todd Loveridge, Benjamin Longwell, Jason Lotridge, Jessica	Montenegro, Karla Moore, Jacqueline Pieroni, Kevin Rose, Matthew Summers, Thomas Wherry, Sean
Group L		**Room A2061**
	Bernhard, Jason Fox, David Hamele, Mitchell Luger, Richard Macian Allen, Diana Miletich, Derek Musikasinthorn, Chayanin Musser, John	Nelson, Austin Nelson, Austin Palmer, Bruce Rice, Robert Wright, Heath Vachon, Tyler
Group M		**Room A2065**
	Freeman, Benjamin Hicks, Brandi Loughlin, Carrie Lai, Tristan McDivitt, Jonathan Mosteller, David Poulin, John	Ryan, Jenny Sunkin, Jonathan Tintle, Scott White, Dennis Segura, Christopher Wilde, Matthew Weatherwax, Robert

HUMAN BEHAVIOR COURSE 2004
LECTURERS

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HUMAN BEHAVIOR COURSE LECTURERS.

David Benedek, MD MAJ, MC, USA **david.benedek@na.amedd.army.mil**

Dr. Benedek is a member of the Walter Reed Army Medical Center staff and the National Capital Area Forensic Psychiatry Fellowship Director. He is a USU medical school graduate and completed general psychiatry and forensic psychiatry training in National Capital Area programs. Dr. Benedek was one of the first psychiatrists deployed to Bosnia and has presented his experiences there at an American Psychiatric Association annual meeting. Dr. Benedek comes from a rich family tradition in psychiatry: his mother is a past president of the American Psychiatric Association.

Charles Engel, MD, MPH LTC, MC, USA **cengel@usuhs.mil**

Dr. Engel is co-director of the Human Behavior Course with Dr. Privitera. He is a full-time member of the USU military faculty and the chief of the Deployment Health Center (formerly the Gulf War Health Center) at Walter Reed Army Medical Center, a center specializing in treatment and research related to redeployment health issues, especially unexplained illnesses such as the infamous “Gulf War Syndrome”. Dr. Engel is a consultation-liaison psychiatrist and epidemiologist and served as the First Cavalry Division psychiatrist during the Gulf War. His interests include medically unexplained physical symptoms, clinical hazard communication, psychiatric practice in primary care, psychiatric research design, health services research, and teaching psychiatrists how to interpret and use research evidence.

Frederick J. Frese, III, PhD

For 15 years until his retirement in 1995, Fred Frese he served as Director of Psychology at Western Reserve Psychiatric Hospital, a state-operated facility in the Cleveland-Akron area. A member of the National Alliance for the Mentally Ill (NAMI) since 1989, Dr. Frese is currently the First Vice President of its National Board. He currently serves on the Board of the Summit County Alliance for the Mentally Ill.

Dr. Frese has given more than 300 presentations on topics related to serious mental illness in 30 states, Canada, Puerto Rico, and Washington, D.C. He has published extensively, and has been on the advisory reviewing boards of five professional journals, including Schizophrenia Bulletin. Along with his wife, Penny, he has also co-produced a widely distributed training video about coping with schizophrenia.

Dr. Frese has been a faculty member at Case Western Reserve University, Kent State, Ohio University, and Ashland Theological Seminary. He has also served as Chairperson of the Akron Area Mental Health Board. Dr. Frese was the founder and first president of Community and State Hospital Psychologists, the American Psychological Association's division for psychologists serving persons with serious mental illness. He also was on the Board of Trustees of the Ohio Psychological Association, where he served as Chair of the committee for the Mentally Ill Homeless. Additionally, he served as president of the National Mental Health Consumers' Association.

Dr. Frese served as a consultant to the Department of Veterans Affairs on a project to improve clinical practice. He has testified before congressional committees on priorities for public mental health services and is a part of the American Psychological Association Task Force for the Seriously Mentally Ill/Seriously Emotionally Disturbed.

Ralph Gemelli, MD CAPT(RET), MC, USN **gemelli@tidalwave.net**

Dr. Gemelli is the founder of the USU Human Behavior Course, is a past psychiatric residency training director at National Naval Medical Center, and has been teaching the normal development portion of the course for many years. He is a psychoanalyst and is currently on the teaching faculty at the prestigious Washington Psychoanalytic Institute. He has recently published an excellent book on normal childhood development (10 copies are available for students in the library). Students consistently rate Dr. Gemelli's lectures as among the very best in the second year, and he is the recipient of numerous teaching awards. Dr. Gemelli is a Naval Academy graduate; the first Academy graduate to go directly into medical school upon completion of his Annapolis education.

Molly Hall, MD Col, MC, USAF **mhall@usuhs.mil**

Dr. Hall is assigned to the Department of Psychiatry, USUHS as an associate professor. She has served in several capacities in the National Capital Area including Chief, Clinical Quality Management Division, Air Force Medical Operations Agency, Bolling AFB (1998-2000); Flight Commander, Mental Health Flight 89th Medical Group, Andrews AFB (1995-1998) and Consultant for Psychiatry to the USAF Surgeon General (1995-1999). Dr. Hall attended Yale College as a member of the first class of women and graduated magna cum laude in 1973 with Departmental Honors in Combined Sciences, Biology and Psychology. Col Hall attended Cornell University Medical College where she was elected to Alpha Omega Alpha in 1976. She joined the Air Force in 1985 and was assigned to Wright-Patterson AFB where she was the Psychiatry Residency program director until 1995. Col Hall received numerous Wright State University faculty awards, including the Career Achievement award in 1995 and was the recipient of the first annual Excellence in Medical Education award conferred by the American Psychiatric Association (APA) in 1991. She has served as a psychiatric consultant to the Astronaut Selection Board at NASA since graduating from the Aerospace Primary Course at Brooks AFB in 1990. Col Hall is a distinguished graduate of the Aerospace Medicine Course and a distinguished graduate of the Air War College Seminar. Col Hall has four children: Kate, Aaron, Hannah and Sarah and three dogs: Elsa, Bou and Merlin.

Jan Hanson, PhD jhanson@usuhs.mil

Dr. Hanson is a special educator and Research Assistant Professor of Pediatrics. She and Dr. Randall co-direct a project that involves parents of children with special needs and adults with chronic health conditions as advisors to the medical education program at USUHS. They have presented abstracts about family-centered care, involving patients and families as advisors, and the patient/physician relationship at many professional meetings. Before coming to USUHS, Dr. Hanson was Director for Research and Evaluation at the Institute for Family-Centered Care from 1992-1999. She has worked in a wide variety of educational and research settings, including special education programs for children of all ages, the DoD system of services for children with special needs, and pre-service and in-service education programs for educators and physicians. Dr. Hanson and Dr. Randall along with several parents will teach the lecture on developmental and learning disorders.

Harry Holloway, MD COL(RET), MC, USA hhollowa@impop.bellatlantic.net

Dr. Holloway is internationally respected as the dean of modern military psychiatry. He served thirty years in the US Army Medical Corps including tours in the Vietnam War, Thailand, and Walter Reed Army Institute of Research. He has around 50 publications and many scholarly works to his credit. He finished his active duty career as the first Chairman of Psychiatry at USU and later held positions as Deputy Dean and Acting Dean of the medical school and the director of life sciences at NASA. Arguably, Dr. Holloway knows more about substance abuse in the military than any other physician does. Currently, he is a co-principal investigator on a project aiming at assembling a scholarly history of substance use in the military through the year 1985. Dr. Holloway will speak to us on alcohol and other substance abuse, disorders due to traumatic events, and on military psychiatry.

Kay Redfield Jamison, PhD

Dr. Jamison is the daughter of an Air Force officer and was brought up in the Washington, D.C. area. She attended UCLA as an undergraduate and as a graduate student in psychology, and she joined the medical school faculty there in 1974. She later founded the UCLA Affective Disorders Clinic, which has treated thousands of patients for depression and manic-depression.

Dr. Jamison is now Professor of Psychiatry at the Johns Hopkins University School of Medicine. The textbook on manic-depressive illness that she wrote in association with Dr. Frederick Goodwin was chosen in 1990 as the Most Outstanding Book in Biomedical Sciences by the Association of American Publishers. She is also the author of, *Touched with Fire: Manic-Depressive Illness and the Artistic Temperament* (1993), and has produced three public television specials on the subject: one on manic-depressive composers, one on Vincent van Gogh, and one on Lord Byron. In recent years she has written and spoken extensively on her own battle with bipolar disorder, publishing two award winning books, one on bipolar disorder (*An Unquiet Mind*, 1997), and one on suicide (*Night Falls Fast: Understanding Suicide*, 2000)

The recipient of numerous national and international scientific awards, Dr. Jamison was a member of the first National Advisory Council for Human Genome Research, and is currently the clinical director for the Dana Consortium on the Genetic Basis of Manic-Depressive Illness.

Timothy Lacy, MD Maj, MC, USAF tlacy@usuhs.mil

Dr. Lacy is the Malcolm Grow Medical Center site director for the National Capital Area Psychiatry Residency Program and the director of Family Practice - Psychiatry Combined Residency Program. Dr. Lacy is a graduate of Wilford Hall Air Force Psychiatry Residency Program. He is an expert on neuropsychiatry.

Charles Privitera, MD COL(RET), MC, USA crivitera@usuhs.mil

Dr. Privitera is co-director of the Human Behavior Course with Dr. Engel. USU students know him best as the psychiatrist at the USU Student Health Center. He is a noted teacher and practitioner of family therapy who is a past USU Dean for Student Affairs. Dr. Privitera has many years of experience in academic medicine and medical student education. His parallel and complimentary roles as student counselor, mentor, and colleague make him ideally suited to teach the course lectures on adult development, the military family, and medical marriages. Dr. Privitera retired from Army medicine after a long and decorated military career.

Ginny Randall, MD COL, MC, USA vrandall@usuhs.mil

Dr. Randall is a developmental pediatrician interested in children under three years of age with developmental disabilities such as cerebral palsy, mental retardation, and autism. She has been an Army pediatrician for 27 years, first as a general pediatrician in Alaska for 6 years, then specializing in developmental pediatrics, then doing a 9 year stretch at the Army Surgeon General's Office working on the policy and budget associated with the care of children with special needs in overseas locations. Currently, Dr. Randall is teaching pediatrics at USU and collaborating with Dr. Hanson in research involving parents of children with special needs as participants and facilitators of medical education.

E. Fuller Torrey, MD

Dr. Torrey is an internationally respected expert, clinician, and scientist specializing in schizophrenia and bipolar disorder. He is the Executive Director of the Stanley Foundation Research Programs, which supports research on schizophrenia and bipolar disorder. From 1976 to 1985, Dr. Torrey was on the clinical staff at St. Elizabeths Hospital, specializing in the treatment of severe psychiatric disorders. From 1988 to 1992, he directed a study of identical twins with schizophrenia and bipolar disorder. His research has explored viruses as a possible cause of these disorders, and he has carried out research in Ireland and Papua New Guinea. Dr. Torrey was educated at Princeton University (BA, Magna Cum Laude), McGill University (MD), and Stanford University (MA in Anthropology). He trained in psychiatry at Stanford University School of Medicine. He practiced general medicine in Ethiopia for two years as a Peace Corps physician, in the South Bronx in an OEO health center, and in Alaska in the Indian Health Service. From 1970 to 1975, he was a special assistant to the Director of the National Institute of Mental Health.

Dr. Torrey is the author of 16 books and more than 200 lay and professional papers. Some of his books have been translated into Japanese, Russian, Italian, and Polish. Dr. Torrey has appeared on national television (e.g., Donahue, Oprah, 20/20, 60 Minutes, and Dateline) and has written for many newspapers. He received two Commendation Medals from the US Public Health Service, a 1984 Special Families Award from the National Alliance for the Mentally Ill (NAMI), a 1991 National Caring Award, and in 1999 received research wards from the International Congress of Schizophrenia and from NARSAD.

Robert J. Ursano, MD Col(Ret), USAF, MC rursano@usuhs.mil

Dr. Ursano is a rabid Notre Dame football fan. When he is not rooting for the Fighting Irish, he serves as Professor and Chair, USU Department of Psychiatry. Dr. Ursano is an internationally respected expert on psychiatric responses to trauma who has co-authored more than 100 publications and written or edited several books. He is a psychoanalyst who has written and lectured extensively on psychotherapy, including psychotherapy for the medically ill, and he is on the editorial board of the Journal of Psychotherapy Research & Practice and Military Medicine. He completed his undergraduate education at Notre Dame. He went to medical school at Yale, but he doesn't seem to follow the Yale football team very closely.

Douglas A. Waldrep, MD LTC, MC, USA Douglas.Waldrep@NA.AMEDD.ARMY.MIL

LTC Douglas A. Waldrep, MD, is presently assigned to the Department of Psychiatry Walter Reed Army Medical Center, Washington DC. After finishing his undergraduate education at West Point, NY and completing five years as a Field Artillery Officer in the United States Army he attended medical school on an Army scholarship at the Medical University of South Carolina, Charleston SC. He completed his General Psychiatry and Child and Adolescent Psychiatry training at Tripler Army Medical Center, Honolulu, HI. He has had the opportunity to practice in Heidelberg, Germany, Dwight D. Eisenhower Army Medical Center, Ft Gordon GA and presently at Walter Reed Army Medical Center. He has held multiple leadership positions in Army Psychiatry and is presently the Chief, Continuity Services, Assistant Psychiatry Training Director for the National Capital Area, Director of Curriculum, the site-training director for the Walter Reed Psychiatry Program as well as a member of the Center for the Study of Traumatic Stress, Uniformed Services University Bethesda, MD. He has spoken and published in the areas of adult, child and adolescent psychiatry. He is extremely happy to be married to Heda for 22 years and adores his two daughters Megan 21, 3rd year at the University of Georgia, and Caraline 14, a freshman at Sherwood High School, Sandy Spring, MD. His favorite past time is spoiling the women in his life.

Human Behavior Course
2004

PART I

FUNDAMENTALS

Human Behavior Course
2004

The Global Burden of Mental Illness

Charles Engel, MD, MPH
LTC, USA, MC

Associate Professor of Psychiatry
Uniformed Services University
Director, Deployment Health Clinical Center, Walter Reed Medical Center

GLOBAL BURDEN OF MENTAL ILLNESS - SLIDES

LEARNING OBJECTIVES & ISSUES FOR THOUGHT.

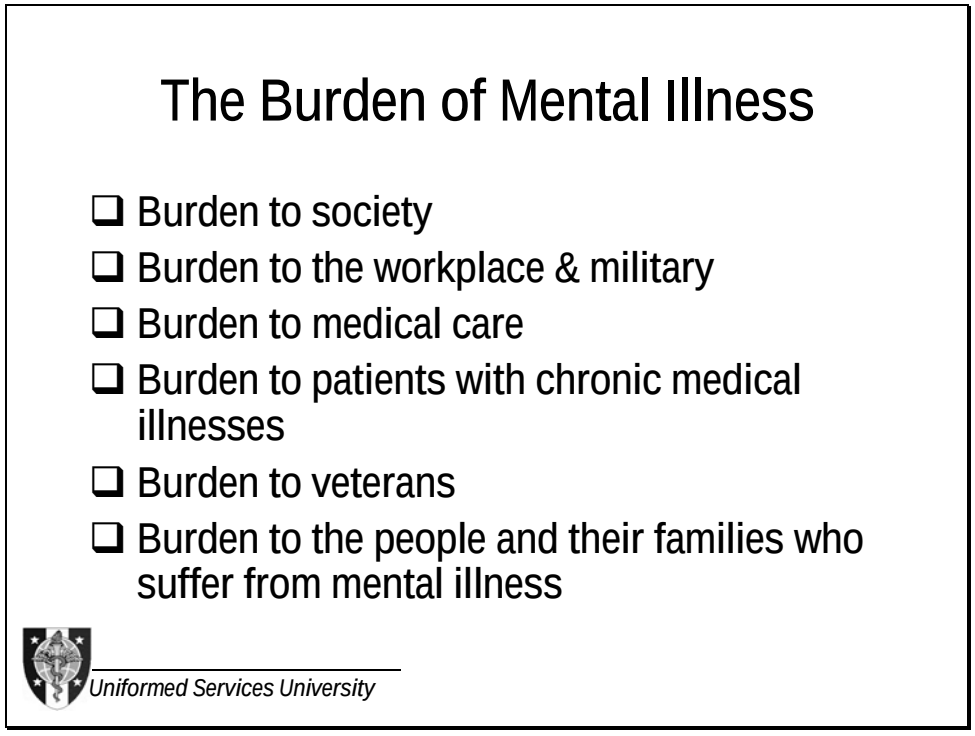
1. Name the ways that mental illness reduces workplace and military productivity.

2. Name the ways that mental illness burdens general medical practitioners.

3. Describe recent research findings that rank the burden of mental illness to other health issues facing society.

4. How could depression be a bigger global problem than cancer?

Slide 1



Slide 2

Hospital-Related Lost Duty Days
Active Duty Military, 1999

Total hospital bed days, all causes	273,171
Bed days due to mental disorders (as primary diagnosis)	76,747 (28%)

Hoge et al. Am J Psychiatry, Sept 2002

Slide 3

Cumulative Percent of Service Members Who Left Military Service Within Specified Time After 1st Hospitalization, 1996 Cohort

	Mental Disorders (n=7,902)	Other 15 ICD-9 Illness Categories (n=59,969)
6 Months	47%	12% (range 11-18%)
1 Year	61%	22% (range 19-30%)
2 Years	74%	38% (range 33-49%)

P<.0001 for all comparisons, independent of age, gender, duration service

Hoge et al. Am J Psychiatry, Sept 2002

Slide 4

Cumulative Percent Who Left Military Service Within Specified Time After First Ambulatory Visit (1997 Cohort)

	Mental Disorders (n=65,562)	15 Other ICD Illness Categories (n=857,490)
6 Months	27%	9% (range 6-19%)
1 Year	40%	18% (range 14-27%)

Differences were independent of age, gender, duration of service

Hoge et al. Am J Psychiatry, Sept 2002

Slide 5

Burden of Depression Alone

- Annual cost (direct & indirect) in U.S. $43.7 Billion
- 10-15% of primary care patients have MDD
- 1 of 8 require MDD treatment during their lifetime.
- Half of depression care occurs in medical settings
- A fifth of depression care occurs in specialty mental health care settings
- MDD sufferers often present to their doctors with vague physical symptoms causing MDD to go undetected or untreated

Uniformed Services University

Simon, 1999; Regier et al, 1993; Regier et al, 1978

Slide 6

30 Leading Worldwide Causes of Disability WHO
Global Burden of Disease Study *

RANK	DISORDER	DALY x 10^4
1	Lower Respiratory Tract Infections	112.9
2	Diarrheal Diseases	99.6
3	Perinatal Disorders	92.3
4	Unipolar Major Depression	50.8
5	Ischemic Heart Disease	46.7
16	War Injuries	20.0
17	Self-Inflicted Injuries	19.0
19	Violence	17.5
20	Alcohol Use	16.7
22	Bipolar Disorder	14.3
26	Schizophrenia	12.8
28	HIV	11.2
29	Diabetes Mellitus	11.1
30	Asthma	10.8

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* Murry, Lopez. *Lancet* 1997; 349:1436-42

Slide 7

Common ICD-9 Diagnoses
CCEP Report on 10,020

	Primary Dx	Any Dx
Psychological	19%	37%
Musc-Skeletal	17%	45%
Ill-Defined	17%	41%
Healthy	11%	19%
Digestive	6%	22%
Dermatologic	6%	20%
Respiratory	7%	18%
Nervous	6%	18%
Endocrine	2%	11%
Infectious	3%	9%

Uniformed Services University

Slide 8

Mental Illness Associated With A Large Portion of Disability Among Help-Seeking Gulf War Veterans

	N	Days of Lost Work Total	Mean	% of All Lost
Psychological --	2,453	8,709	3.6	28.0%
Ill-Defined --	2,506	7,169	2.2	17.0%
Musculoskeletal --	2,351	6,757	2.0	15.2%
Neoplasm --	108	871	8.1	2.8%
Healthy --	1,183	866	0.7	2.8%
Total --	18,075	43,771	2.4	100.0%

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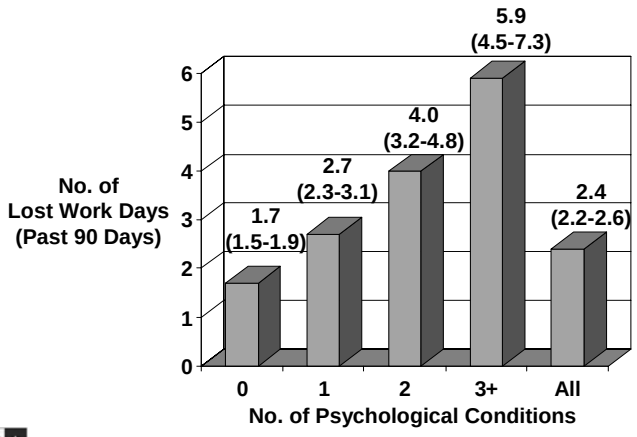
Slide 9

Illness After The Gulf War
Mental Disorders & Morbidity



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Slide 10

Health Care Costs Among Employees of a Major US Corporation in 1995

TABLE 2. Health Care Costs Incurred by 15,153 Employees of a Major U.S. Corporation Who Filed Health Claims in 1995

	Cost of Mental Health Care[a]			Cost of Non-Mental-Health Care[d]			Total Health Care Cost[e]		
		Difference From Depression[c]			Difference From Depression[c]			Difference From Depression[c]	
Disorder	Mean (dollars)[b]	t	p	Mean (dollars)[b]	t	p	Mean (dollars)[b]	t	p
Depressive disorder (N=412)	1,341			3,032			4,373		
Diabetes (N=203)	29	−22.6	<0.001	4,341	2.98	0.03	4,371	0.00	1.00
Heart disease (N=715)	38	−31.5	<0.001	4,080	3.34	0.01	4,117	−0.80	0.97
Hypertension (N=689)	107	−29.9	<0.001	3,558	1.65	0.56	3,666	−2.18	0.25
Back problems (N=349)	38	−26.8	<0.001	3,337	0.83	0.96	3,376	−2.66	0.08
All others (N=12,785)	24	−39.2	<0.001	925	−8.27	<0.001	949	−13.2	<0.001

[a] Proportion of variance explained by the model: R^2=9.9% (df=14,360 for each t test).
[b] Adjusted for age, sex, race, income, geographic region, education, salary, and tenure with the corporation.
[c] Adjusted costs compared with t tests; p values calculated by using the Tukey method of post hoc comparisons.
[d] Proportion of variance explained by the model: R^2=6.0% (df=14,360 for each t test).
[e] Proportion of variance explained by the model: R^2=6.5% (df=14,360 for each t test). Calculated as separate model; therefore, may not represent exact sum of mental and non-mental-health costs.

Uniformed Services University

Druss, Rosenheck, and Sledge, Aug 2000 Am J Psychiatry

Slide 11

Sick Days and Total Employer Costs Among Employees of a Major US Corporation in 1995

TABLE 3. Sick Days and Total Cost Incurred by Employees of a Major U.S. Corporation Who Filed Health Claims and Had Work Data Available in 1995

	Sick Days (N=9,398)[a]			Total Per Capita Health and Disability Costs (N=9,398)[d]			
		Difference From Depression[c]			Difference From Depression[c]		
Disorder	Mean[b]	t	p	Mean (dollars)[b]	t	p	Total Costs to the Corporation (million dollars)[e]
Depressive disorder (N=412)	9.86			5,415			2.2
Diabetes (N=203)	7.17	−2.91	0.04	5,472	0.10	1.00	1.1
Heart disease (N=715)	7.47	−3.27	0.01	5,523	0.24	1.00	3.9
Hypertension (N=689)	5.39	−6.26	<0.001	3,732	−3.88	0.002	2.6
Back problems (N=349)	7.21	−2.90	0.04	4,388	−1.96	0.36	1.5
All others (N=12,785)	3.32	3.31	<0.001	1,292	−11.3	<0.001	16.6

[a] Proportion of variance explained by the model: R^2=6.0% (df=8,922 for each t test).
[b] Adjusted for age, sex, race, income, geographic region, education, salary, and tenure with the corporation.
[c] Adjusted costs compared with t tests; p values calculated by using the Tukey method for post hoc comparisons.
[d] Proportion of variance explained by the model: R^2=8.6% (df=8,922 for each t test).
[e] Per capita cost multiplied by number of employees with disorder. Because each total represented only one measurement, tests of statistical significance of differences among total costs across diseases were not performed.

Uniformed Services University

Druss, Rosenheck, and Sledge, Aug 2000 Am J Psychiatry

Slide 12

Impact of Comorbidity of Depression & Medical Disorders Among Employees of a Major US Corporation in 1995

TABLE 4. Impact of Comorbidity of Depressive Disorder and Four General Medical Disorders Incurred by Employees of a Major U.S. Corporation Who Filed Health Care Claims in 1995

	Health Care Cost[a]			Sick Days[d]			Total Per Capita Health and Disability Costs[e]		
		Difference From All Others[c]			Difference From All Others[c]			Difference From All Others[c]	
Disorder	Mean (dollars)[b]	t	p	Mean[b]	t	p	Mean (dollars)[b]	t	p
Diabetes, heart disease, hypertension, or back problems only (N=1,956)	3,853	22.9	<0.001	6.64	12.50	<0.001	4,646	20.2	<0.001
Depressive disorder only (N=312)	3,417	−8.61	<0.001	8.79	3.19	0.01	4,675	8.4	<0.001
Both (N=100)	7,407	6.73	<0.001	13.48	5.44	<0.001	7,906	8.9	<0.001
All others (12,785)	949			3.32			1,292		

[a] Proportion of variance explained by the model: R^2=6.7% (df=14,362 for each t test).
[b] Adjusted for age, sex, race, income, geographic region, education, salary, and tenure with the corporation.
[c] Adjusted costs compared with t tests; p values calculated by using the Tukey method for post hoc comparisons.
[d] Proportion of variance explained by the model: R^2=6.0% (df=8,924 for each t test).
[e] Proportion of variance explained by the model: R^2=8.5% (df=8,924 for each t test).

Uniformed Services University

Druss, Rosenheck, and Sledge, Aug 2000 Am J Psychiatry

Slide 13

Hidden Burden to Primary Medical Care

Number of Symptoms	Number of Patients	Psychiatric Disorder N (%) Anxiety	Mood	Any
Physical (N=1000)				
0-1	215	2 (1)	5 (2)	16 (7)
2-3	225	17 (7)	27 (12)	50 (22)
4-5	191	25 (13)	44 (23)	67 (35)
6-8	230	68 (30)	100 (44)	140 (61)
9+	130	68 (48)	84 (80)	113 (81)
Somatoform (N=900)				
0	654	68 (10)	107 (16)	102 (25)
1-2	143	42 (29)	60 (42)	74 (52)
3-5	87	35 (40)	40 (46)	77 (89)
6+	49	40 (55)	34 (68)	45 (94)

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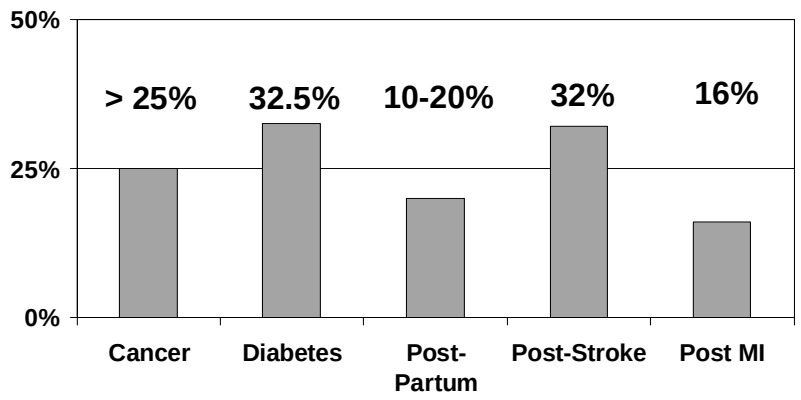
Kroenke et al. Arch Fam Med 1994; 3:774

Slide 14

Prevalence of Depression as a Coexisting Condition



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Massie & Holland, 1995; Lustman et al, 1998; Dobie & Walker, 1992; Morris et al, 1990

Slide 15

The Burden of Mental Illness

- Burden to society
- Burden to the workplace & military
- Burden to medical care
- Burden to patients with chronic medical illnesses
- Burden to veterans
- Burden to the people and their families who suffer from mental illness

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Human Behavior Course
2004

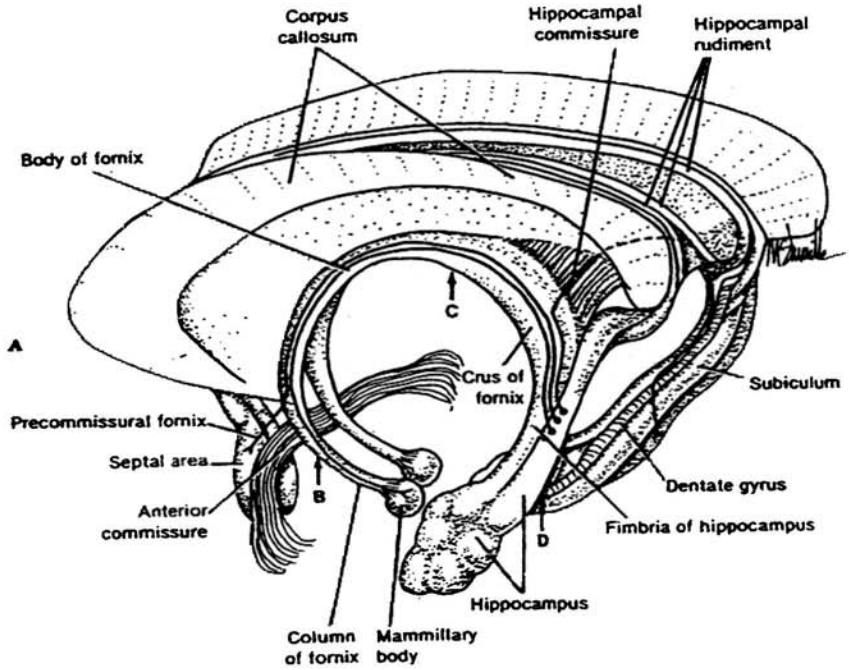
NEUROBIOLOGY OF MENTAL ILLNESS

(Two Lectures)

Timothy Lacy, MD
LtCol, USAF, MC, FS

Director, National Capital Combined
Family Practice-Psychiatry Residency

LIMBIC ANATOMY



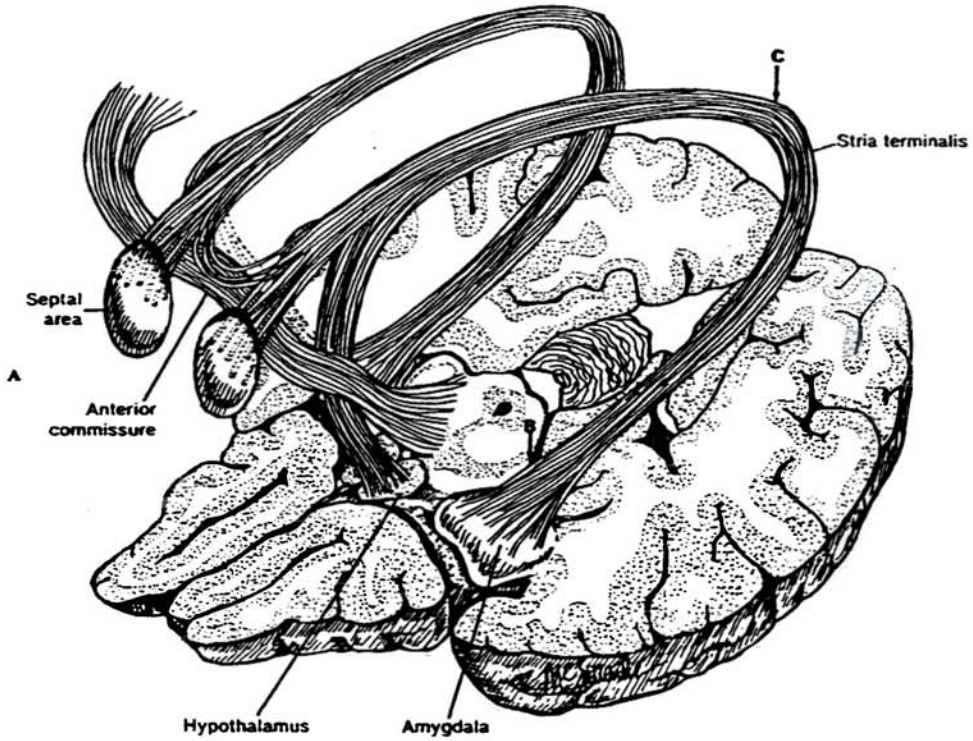


FIGURE 16-17
Origin and course of the stria terminalis. A, Dissection of the stria terminalis and neighboring structures indicating the course of some of its fibers.

116

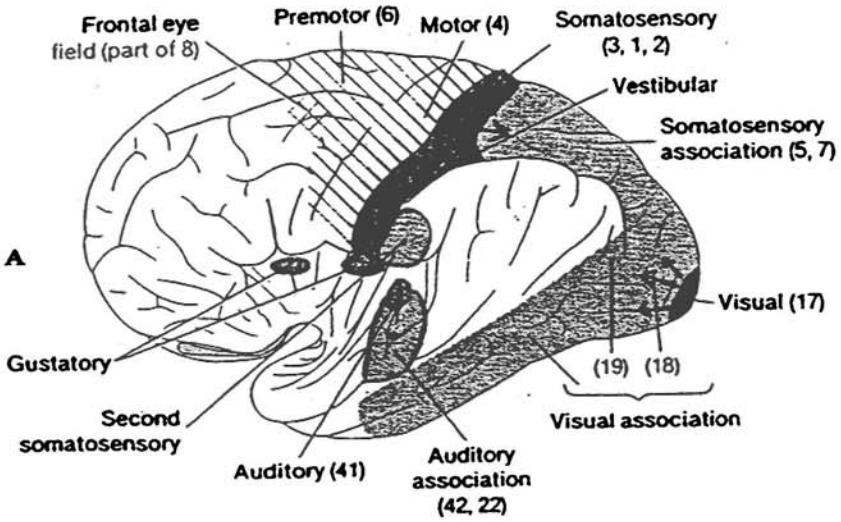
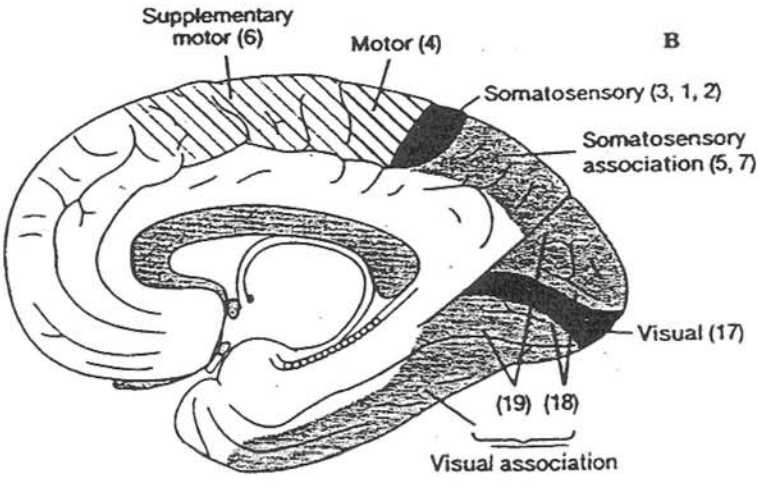


FIGURE 15-15
Summary diagram of some functional areas of the cerebral cortex. The lateral view, as in Figure 15-7, is drawn as though the lateral sulcus had been pried open, exposing the insula. Visual association cortex is particularly extensive in primate brains, occupying not only most of the occipital lobe but also much of the temporal lobe. Many of these various functional areas are associated with one of Brodmann's anatomically defined areas, although sometimes the correspondence is only approximate; commonly used Brodmann numbers are indicated in parentheses. The probable location of primary vestibular cortex is indicated by a filled square.



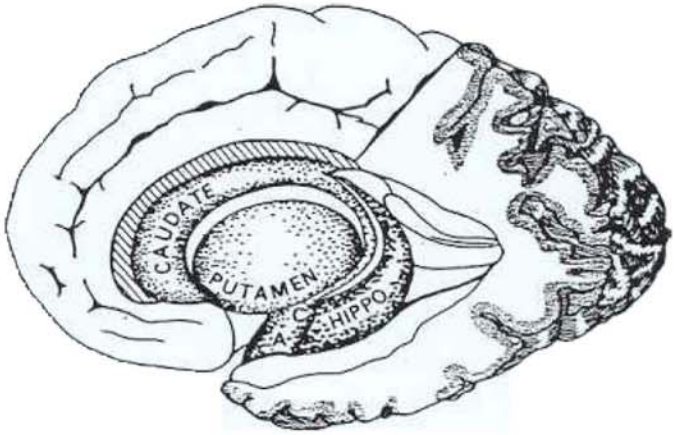


Figure 4-2. A cutaway of the left hemisphere of the human brain, showing location and configuration of the corpus striatum (caudate nucleus and putamen), which constitutes the largest part of the striatal complex. Note how it is encircled by the limbic lobe, including the infolded part of the hippocampus (HIPPO) containing the archicortex. The club on the tail of the caudate (identified by the letter C) is contiguous with the amygdala (A) of the limbic system. Compare with diagram of monkey brain in Figure 4-3. Redrawn after Crosby *et al.* (1962).

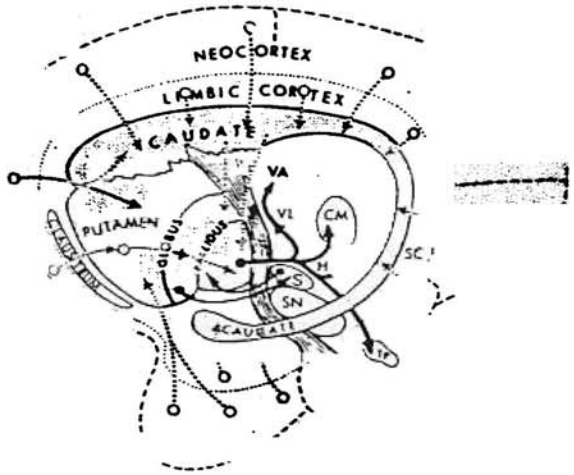


Figure 4-3. Ringlike configuration of striatal complex (stipple) of squirrel monkey, indicating the source and destination of some of its connections. Note origin of some connections from the encircling limbic lobe, as well as from the neocortex. The diagram gives emphasis to the major outflow from the internal segment of the globus pallidus (heavy arrows), projecting, respectively, to the thalamus and tegmentum (see section on connections and also Chapters 13 and 14). The lighter weight arrows show projections from the lateral segment of the globus pallidus to the subthalamic nucleus (S), and from the latter back to the internal segment. The olfactostriatum lies rostroventral to the globus pallidus. Note that, contrary to the opinion of some neurologists, the claustrum is not included as part of the corpus striatum (see legend of Figure 4-5). Abbreviations: CM, N. centri mediani thalami; H, area tegmentalis (Forel); S, corpus subthalamicum; SC, colliculus superior; SN, substantia nigra; TP, N. tegmenti pedunculopontinus; VA, N. ventralis anterior thalami; VL, N. ventralis lateralis thalami. Slightly modified after MacLean (1972a).

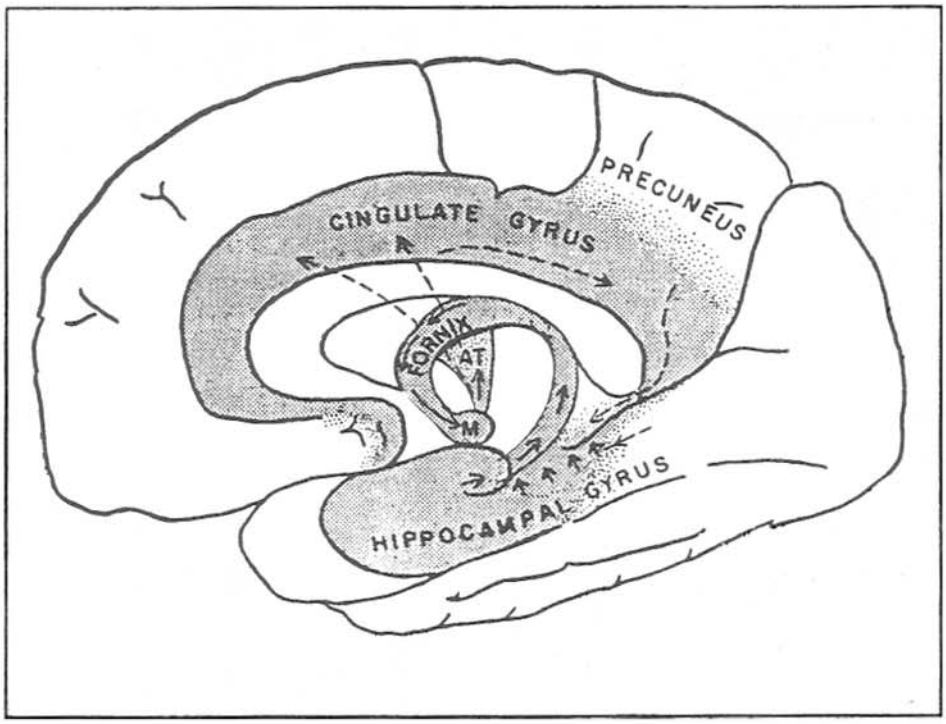


Figure 20.10. Diagram of the brain by Paul MacLean (1949), shaded to show the parts designated as "visceral brain." M = mammillary body, AT = anterior thalamic nucleus. (Courtesy of the American Psychosomatic Society.)

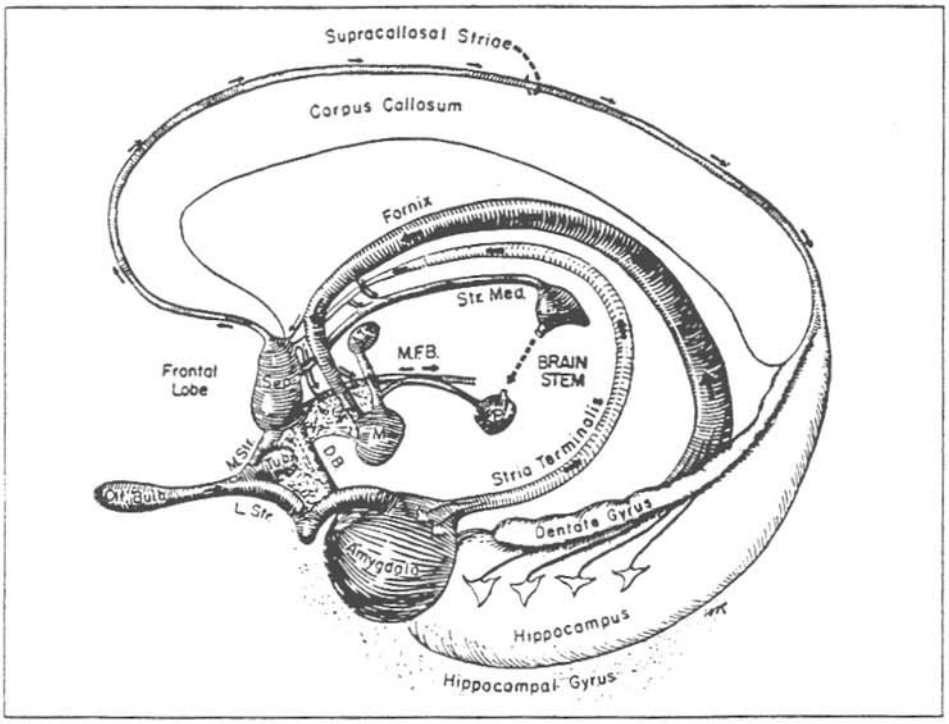


Figure 20.11. Schematic representation of the subcortical structures comprising the rhinencephalon as seen through the medial aspect of the right hemisphere. (From MacLean, 1949; courtesy of the American Psychosomatic Society.)

LEARNING OBJECTIVES & ISSUES FOR THOUGHT.

1. Know the key parts of the central nervous system involved in neuropsychiatric illness and the general role of each.

2. Know the key neurotransmitters and their pathways involved in neuropsychiatric illness and the general role of each.

Slide 1

NEUROSCIENTIFIC FOUNDATIONS OF PSYCHIATRY

Timothy Lacy, M.D., Lt Col, USAF, MC

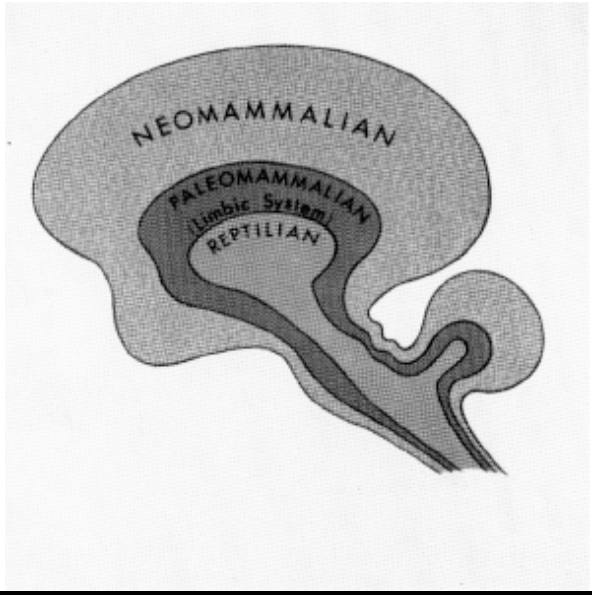
Slide 2

"The Big Picture"

Brain Organization

Slide 3

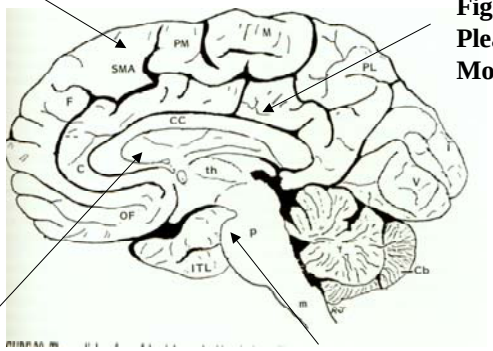
The Triune Brain



Slide 4

Symbolic
Abstract
Reasoning
Choice
Will
Memory
Sensory Processing

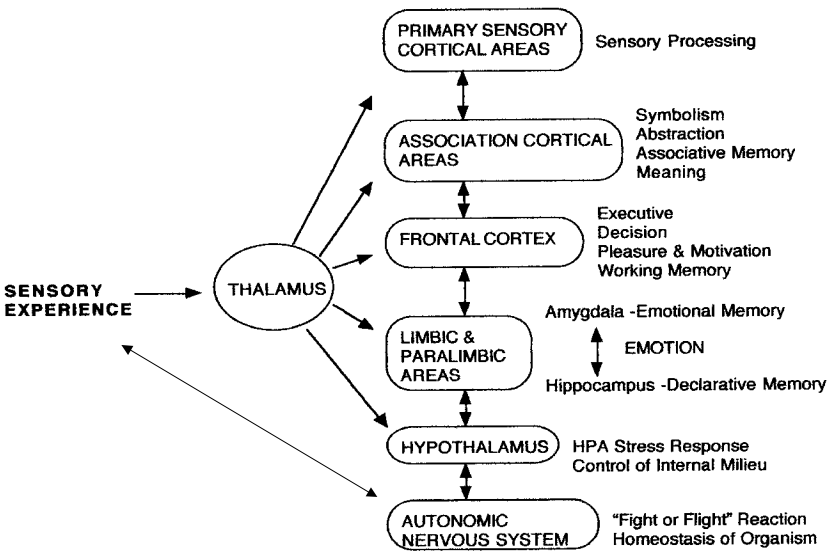
Emotional Experience
Memory Processing
Territorial/Mating
Fight-flight
Pleasure
Motivational Systems



Rituals
Routines
Survival Patterns

Homeostasis
Approach-avoidance/Fight-flight
Stress Response, Hormonal Control
Primitive Routines and Habits
Sets tone for entire CNS
Where most neurotransmitters are made

Slide 5



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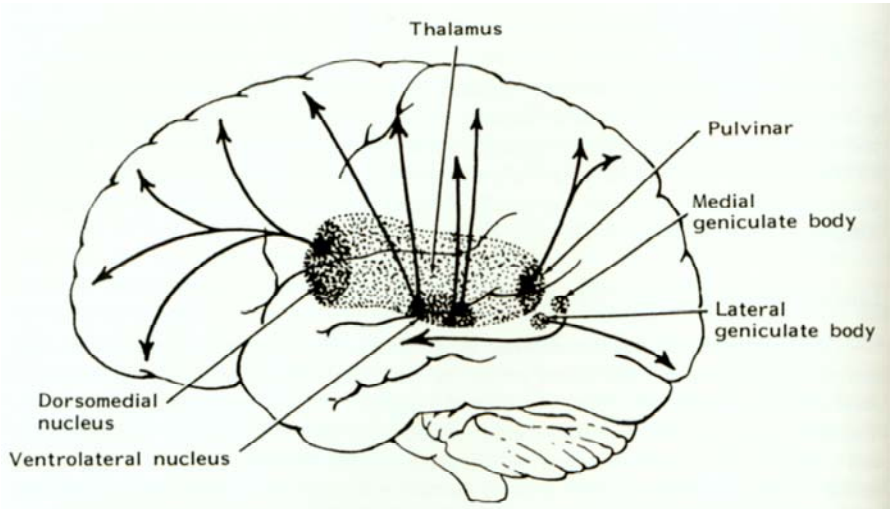
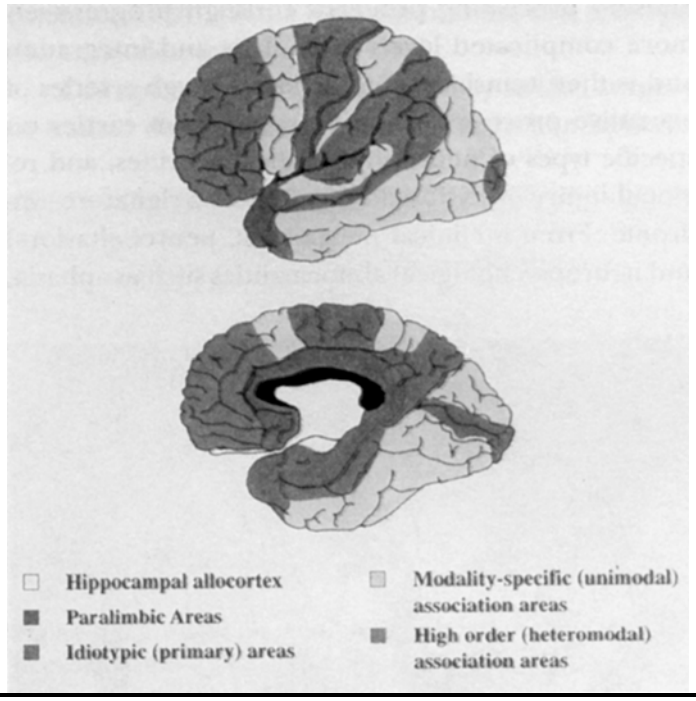


FIGURE 35. Diagram of principle thalamocortical projections. Reproduced, with permission, from *Correlative neuroanatomy,* 20th Ed., by J. DeGroot & J. G. Chusid, copyright Appleton & Lange, E. Norwalk, CT, 1988.

Slide 7



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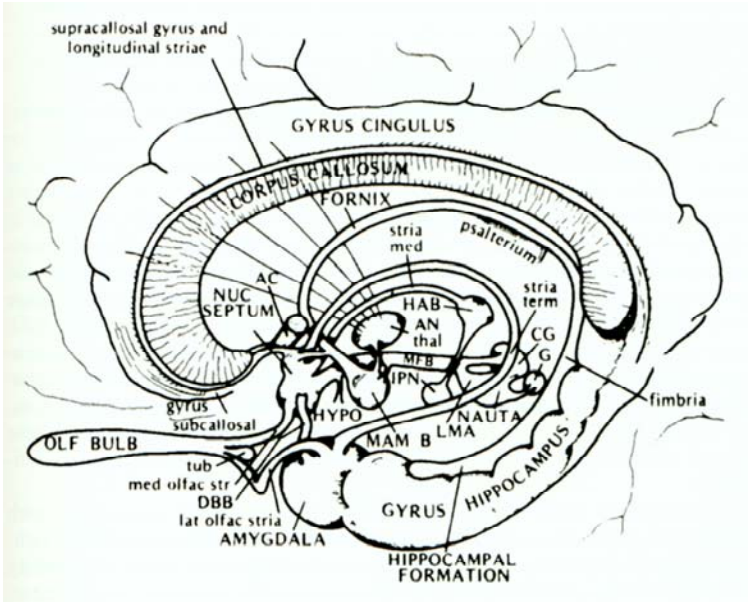
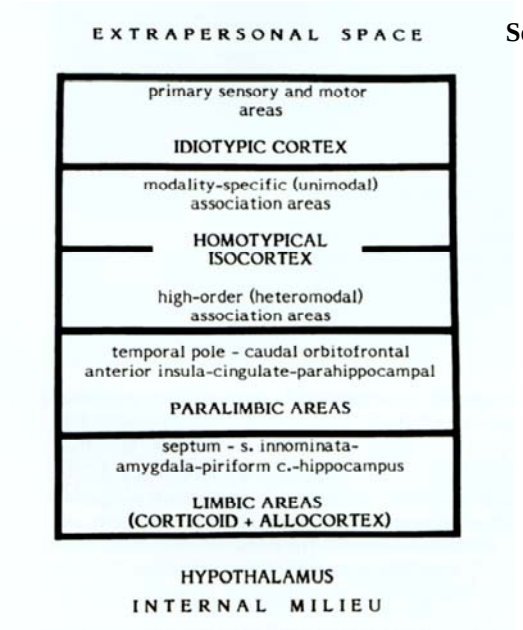


Fig. 9.2. Schematic illustration of the hippocampal–limbic system. Of proved significance for learning are the hippocampal formation, fimbria, fornix and mamillary bodies; these structures represent an inner core of the limbic system. From Heilman et al., 1985a.

Slide 9



Sensory and Motor Function

↕

Symbolic, Abstract
Reasoning, Choice
Will, Memory

↕

Emotional Experience
Memory Formation
Rituals and Routines

↕

Homeostasis
Approach-avoidance
Stress Response
Hormonal Control
Sets tone for entire CNS

Slide 10

Disturbance in one “part” affects the function of the “whole”

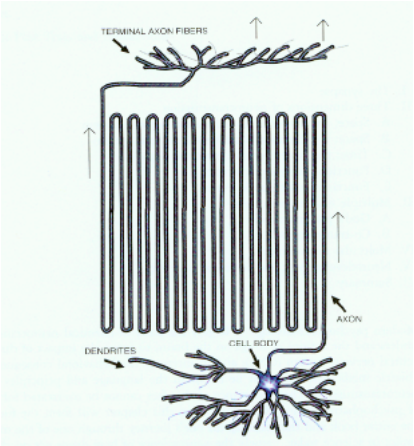
Slide 11

The Details of Brain Function

Slide 12

FUNCTIONAL ANATOMY OF A NEURON

- Cell Body (perikaryon)
- Dendrites
- Axon
- Axon Terminal
- Synapse



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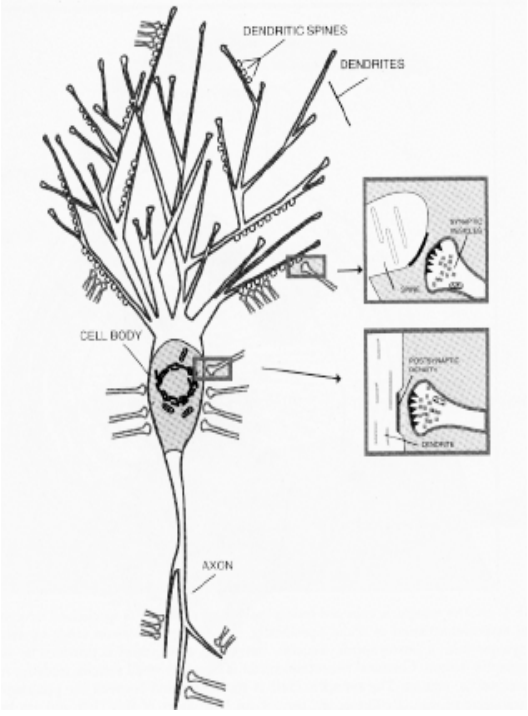
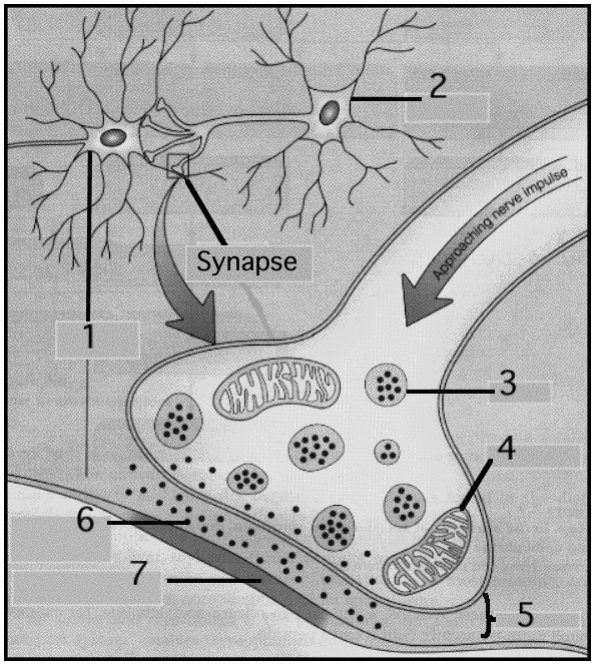


The Neuron

Slide 14



Slide 15

THE SYNAPSE

Slide 16

Electrical conduction

- Ion pumps (Na+/K+) (Ca++)
- Resting membrane potential (-70 mV)
- Action potential (-35 mV)
- Voltage-gated ion channels (Na+, Ca++)

Slide 17

The Action Potential

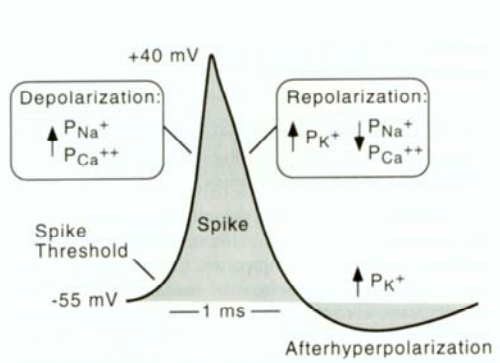


FIG. 3.1 Description of the changes in ionic permeability (P) that result in the upstroke, downstroke, and afterhyperpolarization of action potentials in neurons.

Slide 18

Neurotransmitters

- Criteria
  - contained in a neuron
  - made in the neuron
  - neuron releases it
  - physiologically active on neurons
- Two Classifications (so far)
  - Classical
  - Neuropeptide

Slide 19

NEUROTRANSMITTERS KEY QUESTIONS

- *Where is it made?*
- *Where does it go?*
- *How is it made and what is the rate limiting step in its production?*
- *How is it metabolized?*
- *Role in the CNS?*
- *Clinical significance?*

Slide 20

CLASSICAL NEUROTRANSMITTERS

– Norepinehrine	- Epinephrine
– Serotonin	- Dopamine
– Acetylcholine	- GABA
– Histamine	- Aspartate
– Glutamate	- Glycine
– Homocysteine	- Taurine

Slide 21

Neuropeptide Neurotransmitters

too many to list them all

- **Opioid peptides**
  - **Endorphins, enkephalins**
- **Gut-brain peptides**
  - **VIP, CCK, Secretin, Gastrin, Somatostatin**
- **Bradykinin peptides**
  - **Substance P, others**
- **Pituitary peptides**
  - **Oxytocin, Vasopressin, ACTH,**
- **Hypothalamic peptides**
  - **CRF, TRF, GHRF**

Slide 22

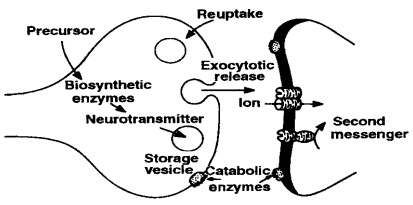
Neurotransmitter Production

- Classical neurotransmitters - synthesized in the terminal bouton
- Neuropeptide neurotransmitters - produced in the cell body and transported to the bouton

Slide 23

Production of classical neurotransmitter in the terminal bouton

Pre-synaptic terminal –terminal bouton



Post-synaptic terminal

FIGURE 1–3. Schematic representation of the processes involved in the synthesis, synaptic action, and inactivation of classical neurotransmitters.

Slide 24

Neuropeptide neurotransmitters - produced in the cell body and transported to the bouton

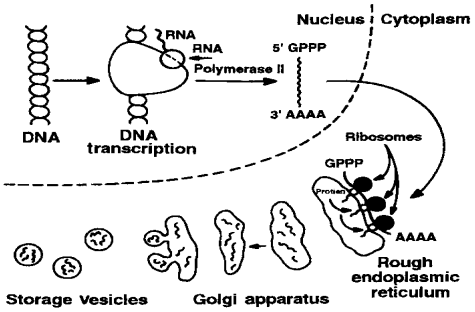


FIGURE 1–4. Sequence of neuropeptide synthesis. Within the nucleus, the gene for the precursor neuropeptide is transcribed into mRNA. The mRNA is transported from the nucleus into the cytoplasm, where it binds to ribosomes. The mRNA is then translated via protein synthesis on the ribosomes in the rough endoplasmic reticulum. Within the Golgi apparatus, the precursor peptide is enzymatically modified to yield the neuropeptide, which is packaged in storage vesicles for axoplasmic transport to the nerve terminal.

Slide 25

Neuropeptide neurotransmitters - precursors modified in the Golgi apparatus

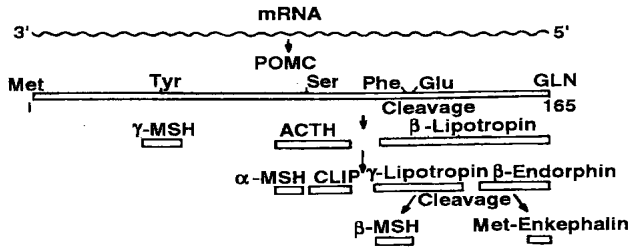
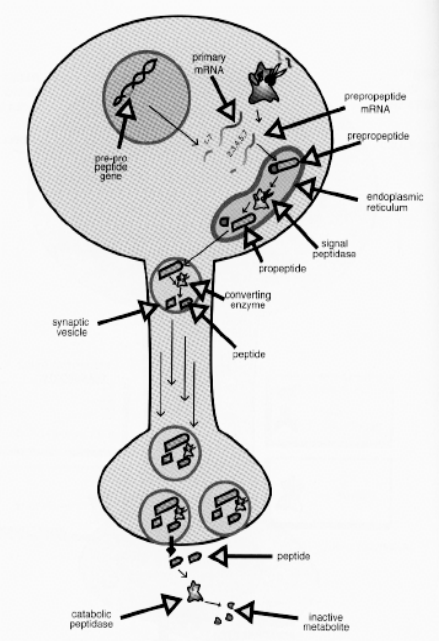


FIGURE 1–5. Processing of proopiomelanocortin (POMC). The precursor protein POMC, which contains 165 amino acids, is enzymatically cleaved to yield the physiologically active peptides indicated. Depending on the cellular localization (anterior pituitary, hypothalamus, midbrain nerve terminals), certain of these neuropeptides are expressed and others are not (see Watson et al. 1985).

Slide 26

Neuropeptide neurotransmitters - produced in the cell body



Slide 27

NOREPINEPHRINE

- *Where is it made?*
- LOCUS CERULEUS (projects throughout brain)

Slide 28

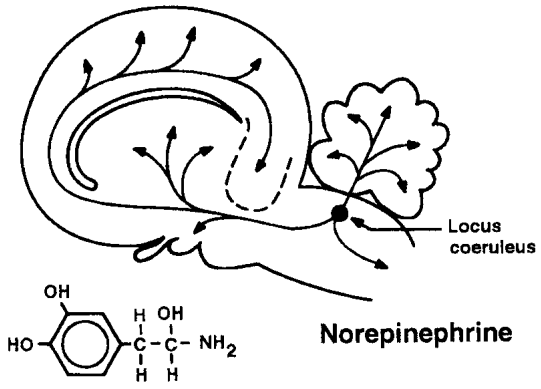


FIGURE 1-13. The primary projections of the noradrenergic locus coeruleus.

Slide 29

NOREPINEPHRINE

- *How is it made?*
  - See diagram
- *Rate limiting step in Production?*
  - Tyrosine Hydroxylase

Slide 30

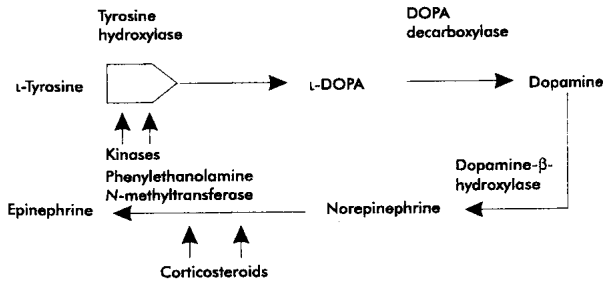


FIGURE 1-2. The biosynthetic pathway for catecholamines. Note that tyrosine hydroxylase is activated by phosphorylation by protein kinases, and the synthesis of phenylethanolamine-*N*-methyltransferase is regulated by corticosteroids.

Slide 31

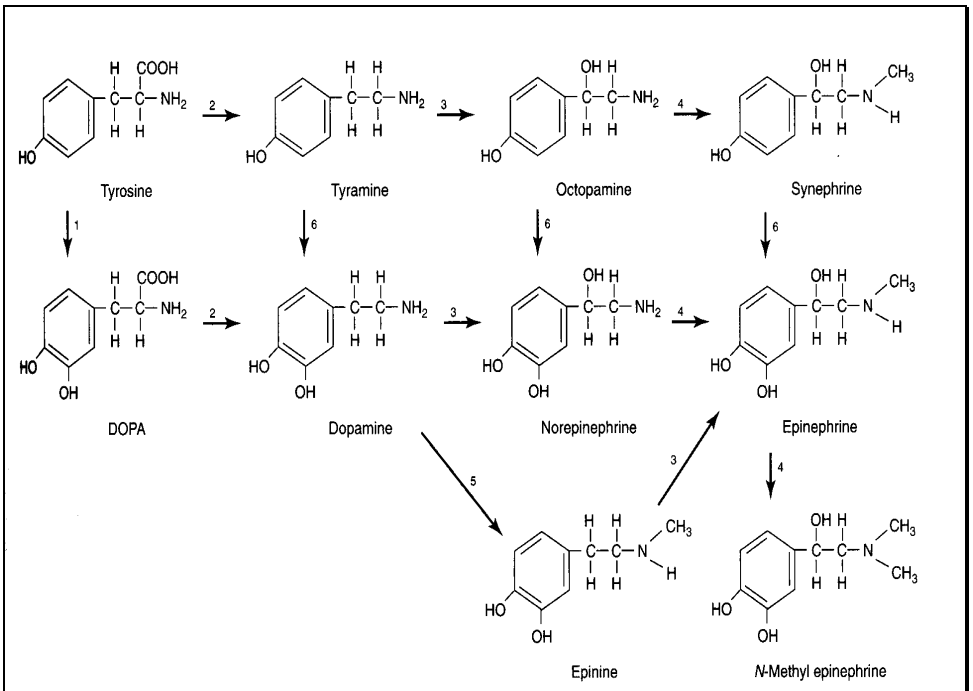


FIGURE 3.2–5

Slide 32

NOREPINEPHRINE

- *How is it metabolized?*
- Monoamine Oxidase (MAO)
  - mitochondria
- Catechol-O-Methyl Transferase (COMT)
  - synapse

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NOREPINEPHRINE

- *Role?*
  - "Modulator" of CNS "tone"
  - Increases reactivity to sensory input

Slide 34

NOREPINEPHRINE

- *Clinical Significance?*
  - dysregulation may play a role in depressive and anxiety disorders
  - key component of the Stress Response

Slide 35

DOPAMINE

- *Where is it made?*
- Ventral Tegmental Area (mesolimbic/mesocortical tracts)
- Substantia Nigra (nigrastriatal tract)
- Arcuate Nucleus (to pituitary)

Slide 36

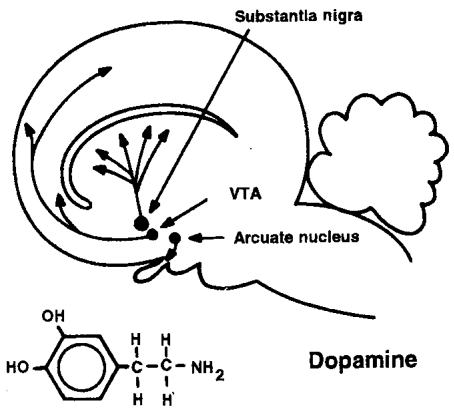


FIGURE 1-15. The three major dopaminergic pathways: the nigrostriatal pathway, the mesocorticolimbic pathway (originating in the ventral tegmental area [VTA]), and the arcuate nucleus pathway to the infundibulum.

Slide 37

DOPAMINE

- *How is it made?*
  - See diagram
- *Rate limiting step?*
- Tyrosine hydroxylase
- *How is it metabolized?*
- MAO
- COMT

Slide 38

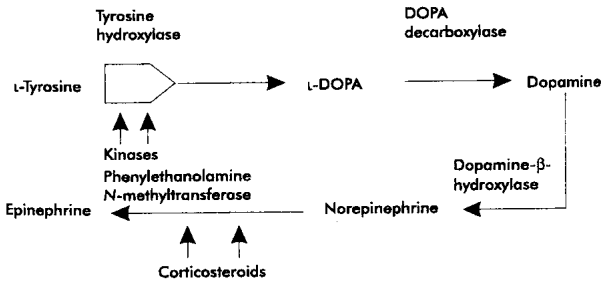


FIGURE 1–2. The biosynthetic pathway for catecholamines. Note that tyrosine hydroxylase is activated by phosphorylation by protein kinases, and the synthesis of phenylethanolamine-*N*-methyltransferase is regulated by corticosteroids.

Slide 39

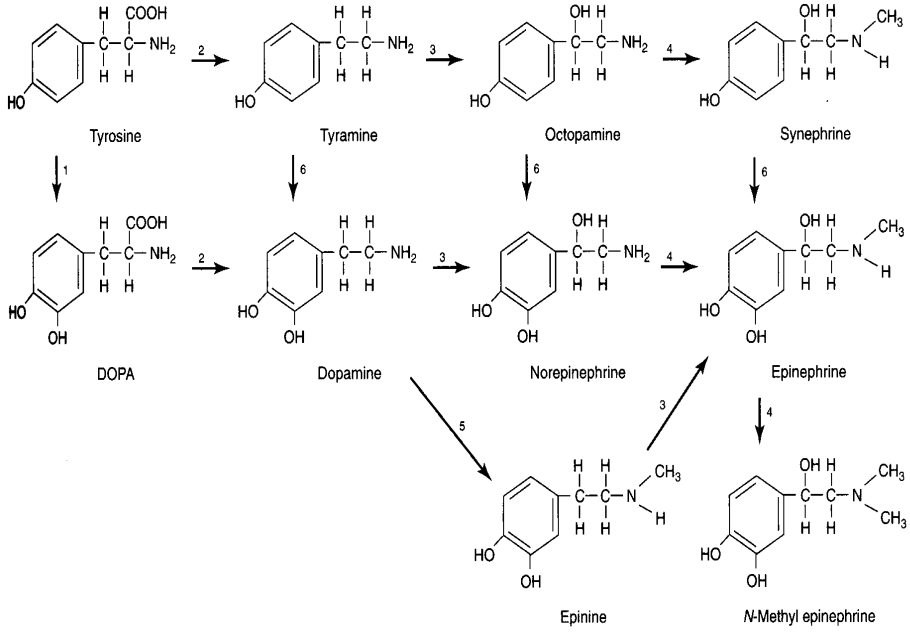


FIGURE 3.2–5

Slide 40

DOPAMINE

- *Role in the CNS?*
  - Mesolimbic tract - Reward, Pleasure
  - Mesocortical tract - Working memory, attention, motivation, cognitive integration
  - Pituitary - PIF
- *Clinical significance?*
  - Implicated in psychotic disorders and addictive disorders
  - Parkinsonism and other movement disorders

Slide 41

SEROTONIN

- *Where is it made?*
- Raphe nuclei in the Pons and Midbrain (projects throughout the brain)
- *Produced from?*
- From the amino acid Tryptophan
- *Rate limiting step?*
- Tryptophan Hydroxylase

Slide 42

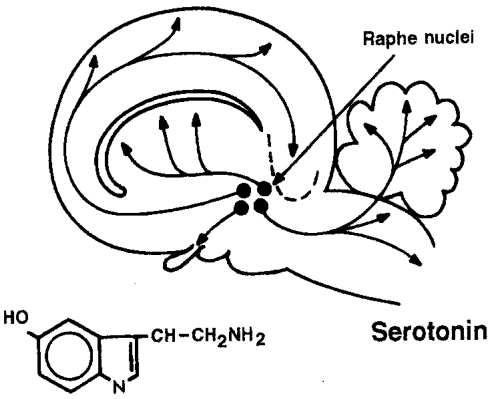
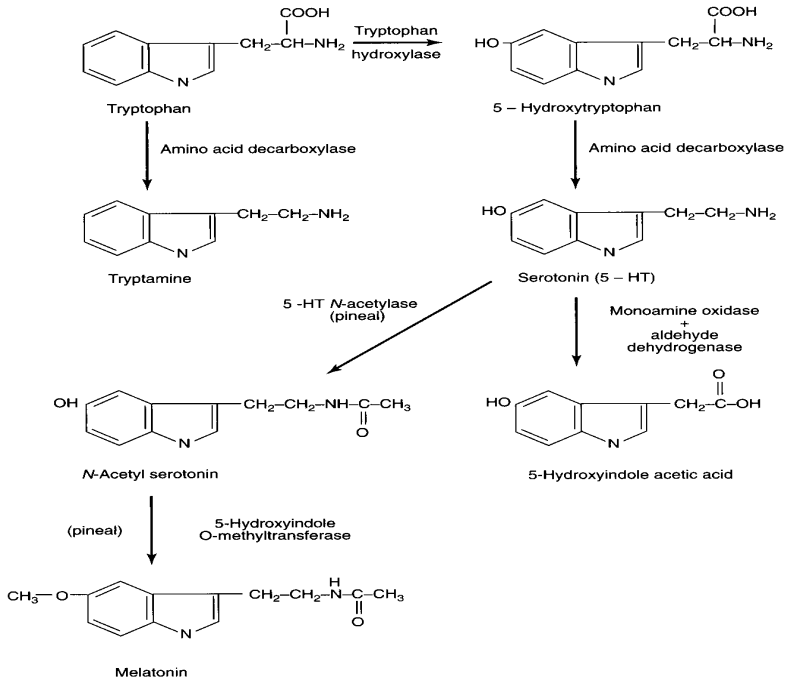


FIGURE 1–14. The pathways of the raphe serotonergic neurons.

Slide 43



Slide 44

SEROTONIN

- *Metabolism?*
  - MAO
  - COMT
- *Role?*
  - Modulator of neuronal tone in the CNS and sympathetic system
  - Plays a role in the regulation of sleep, temperature, pain, appetite, endocrine secretions, and mood.

Slide 45

SEROTONIN

- *Clinical Significance?*
  - Dysregulation implicated in the pathogenesis of: schizophrenia, personality disorders, obsessive-compulsive disorder, anxiety disorders, alcoholism, and chronic pain.

Slide 46

ACETYLCHOLINE

- *Where is it made?*
- Nucleus basalis of Meynert, diagonal band of Broca, and medial septal region (projects throughout the brain), there are also local cholinergic interneurons in the striatum
- *Role in the CNS?*
  - Attention, memory, learning, possibly mood and sleep

Slide 47

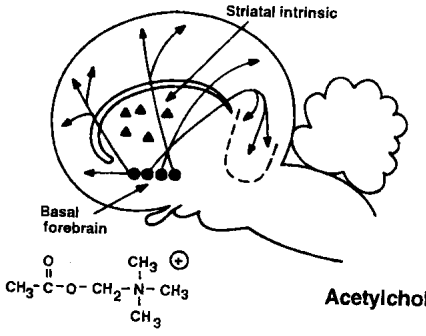


FIGURE 1-16. The forebrain cholinergic neurons. Cholinergic neurons in the basal forebrain, including the nucleus basalis of Meynert, the diagonal band of Broca, and the medial septal nucleus, innervate the cerebral cortex, hippocampus, and limbic structures. The striatum contains local circuit cholinergic interneurons.

Slide 48

ACETYLCHOLINE

- *Clinical significance?*
  - Cholinergic loss can lead to dementia or delirium

Slide 49

AMINO ACIDS

- GABA - major inhibitory neurotransmitter
- GLUTAMATE - major excitatory neurotransmitter
  - NMDA receptor
    - PCP
    - Learning via LTP
    - Excitotoxicity and neuronal damage

Slide 50

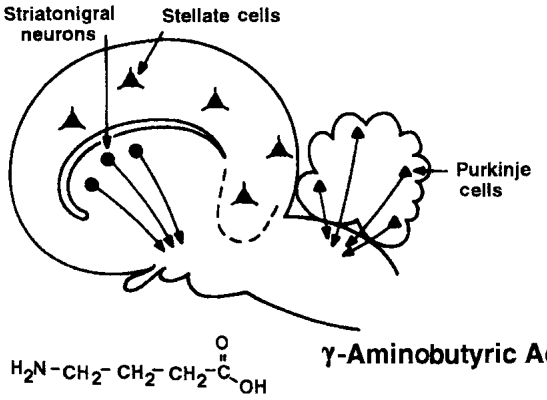


FIGURE 1-17. Major GABAergic pathways. The inhibitory neurotransmitter GABA is synthesized by local circuit stellate cells within the cerebral cortex, by the cerebellar Purkinje cells, and by striatonigral neurons.

Slide 51

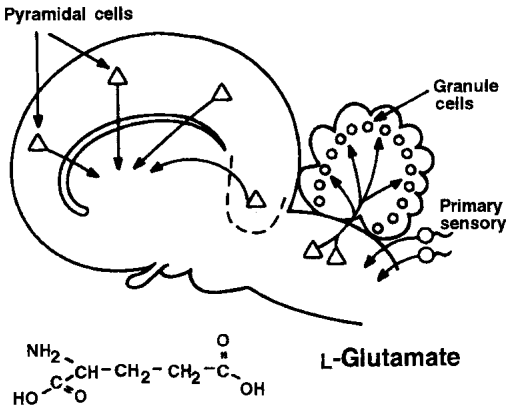


FIGURE 1-18. Major glutamatergic pathway. The excitatory neurotransmitter L-glutamic acid is released by a number of neurons including cortical and hippocampal pyramidal cells, cerebellar granule cells, cerebellar climbing fibers, and primary sensory afferents.

Human Behavior Course
2004

PART II

DEVELOPMENT

Human Behavior Course
2004

ADULT DEVELOPMENT

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COL, MC, USA (RET)

Professor of Psychiatry
Uniformed Services University

HUMAN BEHAVIOR COURSE 2004
ADULT DEVELOPMENT – HANDOUT

LEARNING OBJECTIVES & ISSUES FOR THOUGHT.

1. Know Erickson's eight stages of development and have a basic understanding of what characterizes each stage.

2. Know the basic defense mechanisms, why defense mechanisms are important, and Vaillant's hierarchy of defense mechanisms.

3. Have a general familiarity with the three landmark studies that have dominated adult life-cycle scholarship (studies by Gould, Vaillant, and Levinson).

I. Introduction

Lecture Notes

Historical Perspective: Developmental stages have been described for thousands of years -- Talmud, Confucius, Shakespeare's "As You Like It" (Attach 1). See Table 1.1-1 below:

TABLE 1.1-1
Three Versions of "The Ages of Man"*

The Sayings of the Fathers (from the Talmud)

5 years is the age of reading (Scripture);
10 for Mishnah (the laws);
13 for the Commandments (Bar Mitzvah, moral responsibility);
15 for Gemara (Talmudic discussions; abstract reasoning);
18 for Hupa (wedding canopy);
20 for seeking a livelihood (pursuing an occupation);
30 for attaining full strength ("Koah");
40 for understanding;
50 for giving counsel;
60 for becoming an elder (wisdom, old age);
70 for white hair;
80 for Gevurah (new, special strength of age);
90 for being bent under the weight of the years;
100 for being as if already dead and passed away from the world.

Confucius

The Master said:
At 15, I set my heart upon learning.
At 30, I had planted my feet firm upon the ground.
At 40, I no longer suffered from perplexities.
At 50, I knew what were the biddings of heaven.
At 60, I heard them with docile ear.
At 70, I could follow the dictates of my own heart; for what I desired no longer overstepped the boundaries of right.

Solon

0–7	A boy at first is the man; unripe; then he casts his teeth; milk-teeth befitting the child he sheds in his seventh year.
7–14	Then to his seven years, God adding another seven, signs of approaching manhood show in the bud.
14–21	Still, in the third of the sevens, his limbs are growing; his chin touched with a fleecy down, the bloom of the cheek gone.
21–28	Now, in the fourth of the sevens, ripen to greatest completeness the powers of the man, and his worth becomes plain to see.
28–35	In the fifth, he bethinks him that this is the season for courting, bethinks him that sons will preserve and continue his line.
35–42	Now, in the sixth, his mind, ever open to virtue, broadens, and never inspires him to profitless deeds.
42–56	Seven time seven, and eight; the tongue and the mind for fourteen years are now at their best.
56–63	Still, in the ninth, he is able, but never so nimble in speech and in wit as he was in the days of his prime.
63–70	Who to the tenth has attained, and has lived to complete it, has come to the time to depart on the ebb-tide of Death.

* From Levinson D J, with Darrow C N, Klein E B, Levinson M H, McKee B: *The Seasons of a Man's Life.* Alfred A Knopf, New York, 1978.

ALL THE WORLD'S A STAGE,
AND ALL THE MEN AND WOMEN MERELY PLAYERS.
THEY HAVE THEIR EXISTS AND THEIR
ENTRANCES,
AND ONE MAN IN HIS TIME PLAYS MANY PARTS,
HIS ACTS BEING SEVEN AGES. AT FIRST THE
INFANT, MEWLING AND PUKING IN THE NURSE'S
ARMS. THEN THE WHINING SCHOOLBOY, WITH
HIS SATCHEL AND SHINING MORNING FACE,
CREEPING LIKE SNAIL UNWILLINGLY TO SCHOOL.
AND THEN THE LOVER SIGHING LIKE FURNACE,
WITH A WOEFUL BALLAD MADE TO HIS MISTRESS'
EYEBROW. THEN A SOLDIER, FULL OF STRANGE
OATHS AND BEARDED LIKE THE PARD, JEALOUS
IN HONOR, SUDDEN AND QUICK IN QUARREL,
SEEKING THE BAUBLE REPUTATION EVEN IN THE
CANNON'S MOUTH. AND THEN THE JUSTICE, IN
FAIR ROUND BELLY WITH GOOD CAPON LINED
WITH EYES SEVERE AND BEARD OF FORMAL CUT,
FULL OF WISE SAWS AND MODERN INSTANCES,
AND SO HE PLAYS HIS PART. THE SIXTH AGE
SHIFTS INTO THE LEAN AND SLIPPERED
PANTALOON WITH SPECTACLES ON NOSE AND PUCH
ON SIDE, HIS YOUTHFUL HOSE, WELL SAVED, A
WORLD TOO WIDE FOR HIS SHRUNK SHANK, AND
HIS BIG MANLY VOICE, TURNING AGAIN TOWARD
CHILDISH TREBLE, PIPES AND WHISTLES IN HIS
SOUND. LAST SCENE OF ALL THAT ENDS THIS
STRANGE EVENTFUL HISTORY, IS SECOND
CHILDISHNESS AND MERE OBLIVION, SANS
TEETH, SANS EYES, SANS TASTE, SANS
EVERYTHING.

SHAKESPEARE, "AS YOU LIKE IT", vii 142-166

II. Review Erik Erikson's Stages

Lecture Notes

This is a favorite of USMLE and I suggest you keep this summary for USMLE study (Attach 2, three pages).

III. Roger Gould: "Concept of Adulthood Development," chapter 45, pp. 1998-2007. See Table 45-1 below:

TABLE 45-1
The Four Major False Assumptions and Subassumptions

Major false assumption I: I will always belong to my parents and believe in their vision of reality.
Five Subassumptions
1. If I get any more independent, it will be a disaster.
2. I can see the world only through my parent's assumptions.
3. Only they can guarantee my safety.
4. They must be my only family.
5. I do not own my body.

Major false assumption II: Doing it their way with will power and perseverance will probably bring results, but when I become too frustrated, confused, or tired or am simply unable to cope, they will step in and show me the way.
Four Subassumptions
1. Rewards will come automatically, if you do what you are supposed to do.
2. There is only one right way to do things.
3. My loved ones are able to do for me what I have not been able to do for myself.
4. Rationality, commitment, and effort will always prevail over all other forces.

Major false assumption III: Life is simple and controllable. There are no significant coexisting, contradictory forces within me.
Four Subassumptions
1. What I know intellectually, I know emotionally.
2. I am not like my parents in ways I do not want to be.
3. I can see the reality of those close to me quite clearly.
4. Threats to my security are not real.

Major false assumption IV: There is no evil in me or death in the world; the demons have been expelled.
Four Subassumptions
1. Death cannot happen to me.
2. It is impossible to live without a protector in life (women).
3. There is no life beyond this family.
4. I am an innocent.

R. Gould: *"adult consciousness is shaped by gradually understanding and transcending the childhood consciousness and beliefs..."*

R. Gould: *"an adult view of the world is realized to the extent that we challenge and master these false assumptions or illusions of safety from childhood."*

ERIKSON'S EIGHT STAGES OF MAN

Unlike others among Freud's followers, such as Adler and Jung, who sought to substitute their own conceptions for Freud's, Erikson has further differentiated some of the Freudian conceptions and incorporated these into a broader ego psychology that goes beyond classical psychoanalysis while remaining faithful to its inspiration. Within Freudian psychology, which emphasized the role of unconscious drives and mental processes, the ego was relatively neglected until the last years of Freud's life. Once the ego was freed from its ties to instinctual forces, the way was clear to elaborate a theory of the relatively autonomous ego. This, in effect is what Erikson has done. Erikson, has, however, focused upon a hitherto neglected aspect of ego functioning. Erikson has argued that the ego comes equipped with a number of social senses that undergo elaboration parallel with intellectual and physical development. The "psychosocial stages" outlined by Erikson are in effect the stages in the elaboration of these social senses. The psychosocial stages differ from the Freudian stages. In Freudian theory, the psychosexual stages are described in terms of their "geography." In Erikson's theory, the stages are described in terms of a series of encounters between the ego's various social senses and the developmental tasks endemic to each stage of the human life cycle. In describing the psychosocial stages of development, Erikson suggests that an individual's social propensities are bipolar. While all of these social senses are present from the start of life, there is a period in the life cycle during which a particular pair, because of a complex of developmental and sociocultural factors, comes into special prominence. The experiences that occur during this period have more than usual impact upon strengthening or weakening the bipolar propensities. At each stage certain social propensities come to the fore and pose a crisis for the individual, inasmuch as during that period one or another propensity will become dominant and may remain so throughout the life cycle. Which propensity will upon the individual's social experiences during the period and upon what has occurred before in the individual's life history. This is not to say that the outcomes of these "crises" are permanent and unchangeable, but only to emphasize that the outcomes tend to be self-reinforcing and hence are more difficult to change after the critical period is over.

I. Trust and Mistrust

During the first two years of life, the crisis at the forefront of the infant's interpersonal encounters has to do with the strengthening of his sense of trust to a greater extent than his sense of mistrust. Both trust and mistrust are required for effective adaptation to the social world. Healthy personality development demands that the child's sense of trust in other people and in himself outweigh his sense of mistrust of others and of the self. Consequently, it is important during the first years of life that the experiences which nourish the child's sense of trust outweigh the experiences that reinforce his sense of mistrust. A strong sense of trust, balanced by a moderate amount of distrust, is the best outcome to the developmental stage.

II. Development of Autonomy vs Shame and Doubt

The second stage in Erikson's scheme, roughly the second and third years of life, is concerned with the crisis as to whether the toddler's sense of autonomy will be strengthened to a greater extent than his sense of shame and doubt. The sense of autonomy shows itself in the child's newly developed powers of motor control and language production. The preferred outcome of this period is that the child's sense of autonomy outweigh his sense of shame and doubt.

III. Emergence of Initiative and a Sense of Guilt

The next stage, roughly the age of 3 to 5, sees the coming into prominence of the crisis between the encouragement of a sense of initiative and that of a sense of guilt. In Erikson's view, these social senses are prominent at a time when the child's motor skills are quite advanced and at a time when his language skills are quite proficient. At this period young people have a strong desire to choose what materials they want to work with and what activities they want to participate in.

IV. A Sense of Industry or of Inferiority

Beginning with the elementary school years (usually ages 6-7) and extending through the period of early adolescence, Erikson proposes that other social propensities come into prominence, namely, the sense of industry on the one hand and the sense of inferiority on the other. The sense of industry parallels the school-age child's new mental and motor capacities. On the motor, plane, the child has acquired fine as well as large muscle motor control and can use a variety of tools such as drills, saws, and hammers with considerable skill and precision. Along with the new motor skills which emerge at this stage are new intellectual skills which take the school-age child far beyond the mental powers of the preschool child. There are, however, many children whose sense of industry is not encouraged and whose sense of inferiority is nourished instead. A child who has a physical handicap, a mental limitation or an emotional disturbance may have school experiences that reinforce his sense of inferiority. The child of low average intelligence, for example, meets repeated failure in school and soon begins to hate the while experience.

V. Ego Identity and Role Confusion

With the onset of adolescence, and all of its dramatic changes in the child's physiology, physiognomy and intelligence, still other social propensities come into prominence. At this stage, according to Erikson's theory, what come to the fore is the adolescent's sense of ego identity on the one hand and his sense of role confusion on the other. The resolution of the "crisis" or confrontation between ego propensity and social milieu in adolescence is determined by many factors, including the family, adult instructors and peer group. In constructing his sense of ego identity, the young person must integrate what he has learned about himself from his many different social roles and relationships.

A. Among the adolescent's new intellectual powers is his ability to deal with theories, to integrate disparate phenomena and events within more general encompassing laws and principles. This ability is then put in the service of nourishing a sense of ego identity, a sense of continuity and sameness amidst the flux of change which is adolescence.

B. Other young people have trouble integrating their diverse roles, attributes and personality characteristics and experience an enhanced sense of role confusion. In some instances, the difficulty derives from an overwhelming sense of mistrust which makes the young person reluctant to commit himself to any particular life style.

C. Still other young people deal with the problem by adopting a negative identity, which is often a pattern of behavior proscribed by parents or society.

VI. The Young Adult: Intimacy vs Isolation

A. The propensities which move into the limelight during young adulthood are intimacy on the one hand and isolation on the other. Intimacy, in Erikson's framework, is more than sexual and has to do with caring and sharing as well as with physical intimacy. True intimacy presupposes that the individual regards someone else's needs and concerns as being as important

as his own. (Erikson's conception of intimacy is very close to that of Harry Stack Sullivan.) But intimacy presupposes a solid sense of ego identity, because a genuine concern for others presupposes a sense of personal solidarity, the absence of any fear or anxiety about losing oneself in the act of giving to someone else. This holds true on the intellectual, emotional and sexual planes, where true giving can occur only when the individual who is giving fears no loss of self in the process.

VII. A Generative Sense vs Psychologic Stagnation

In the usual course of events, an outcome of intimacy is marriage and the establishment of home and family, still other social propensities come to the fore. In Erikson's view, there is on the one hand the possibility of nourishing a budding sense of generativity, of concern for and dedication to the next generation and future generations. Ordinarily, generativity is shown in the rearing of children and participation in programs for youth. But marriage and children are not essential for reinforcing the sense of generativity.

VIII. A final Sense of Integrity or Despair

A. Toward the end of life, the mature years, there is time for reflection upon one's life and how it has been lived. Such reflection brings forward two other social propensities, i.e., a sense of integrity and a sense of despair. Erikson argues that the individual who looks backward upon his life with some satisfaction and with few regrets nourishes a sense of integrity, a sense of having lived totally and well and of being able to accept death without merely succumbing to it. But the individual who looks back at his life as a series of missed opportunities, of personal and social misfortunes, nourishes a sense of bitter despair at what might have been "if only." In such individual, death is feared because it brings home the fact that the past cannot be undone and life cannot be lived over.

The Universals in Erikson's scheme are the social propensities of trust vs mistrust; autonomy vs shame and doubt; initiative vs guilt; industry vs inferiority; ego identity vs role confusion; intimacy vs isolation; generativity vs stagnation; and integrity vs despair. The extent to which these propensities are realized and balanced is dependent, however, upon the particular nature of the individual's experience. Hence Erikson's theory is consonant with the current view in genetics which regards traits as being determined by a "gene complex" which has a particular "norm of reaction," a range of phenotypic manifestations whose particular realization will depend upon the kind of environment in which they are placed.

A second characteristic of Erikson's scheme of development has to do with the way in which social experience is communicated. Erikson suggests that individuals carry with them residual identities from their sociocultural past which have been transmitted unconsciously in certain attitudes and patterns of behavior. Attitudes, roles and behavior patterns are thus transmitted unconsciously from parent to child in such ways that a child can demonstrate an orientation of grandparents whom he has never known and whom his own parents did not subconsciously emulate.

IV. George Vaillant
-Hierarchy of Defense Mechanisms
-See Attachment III.

G. Vaillant: *"Adult development occurred because of a gradual shift from IMMATURE to MATURE EGO DEFENSES*

G. Vaillant: *"Factors that accounted for the development of more mature defenses over time:*
(1) *Development of a person's nervous system* (cognitive development),
(2) The presence of *suitable models for identification,*
(3) *Parenting experiences early in life,* and
(4) Close *personal support network.*

G. Vaillant: Corroborated Erik Erikson's model of the Life Cycle...but offered <u>one</u> change,

G. Vaillant: Between Erikson's stage of Intimacy vs. Isolation (#6, 21-40 y.o.) and Generativity vs. Stagnation (#7, 40-65 y.o.), Intermediate stage of <u>CAREER CONSOLIDATION</u>.

G. Vaillant/ L. Cartwright: <u>CAREER CONSOLIDATION STAGE (Men & Women)</u>
(1) Narrowing of focus,
(2) Less affable and outgoing,
(3) Less sensitive to the needs of others, and
(4) Increasingly focused on achievement and ambition.

Vaillant's Hierarchy of Defense Mechanisms

I. Psychotic Defenses: common in healthy persons before the age of 5; normal in adult dreams and projective testing.

a. Denial of external reality

b. Distortion: gross reshaping of external reality to suit inner needs, such as wish fulfilling delusions

c. Delusional projection: frank delusions (usually persecutory) about external reality

II. Immature Defenses: common among healthy children and adolescents, in individuals with character (personality) disorders, and among adults in psychotherapy.

a. Fantasy: the use of fantasy to create more comforting or controllable people in one's own mind or to resolve conflicts with others

(e.g. often used in chaotic and abusive families since the reality is so devastating)

b. Projection: attributing one's own unacceptable thoughts/feelings to someone else

c. Hypochondriasis: transforming negative feelings towards someone else, towards oneself, and then into physical symptoms

d. Passive Aggressive Behavior or Masochism: similar to c., aggression is ineffectively expressed through passivity toward self or others

e. Acting out: behavioral actions to avoid conscious awareness of unpleasant feelings

III. Neurotic Defenses: universal and common in all of us, especially under stress

a. Intellectualization: the thought is conscious and one "overvalues" cognition, without awareness of the associated feelings. (Described aptly as "one living in their head!")

b. Repression: the feeling is often conscious, but the associated thoughts/images are not. Present in amnesia and conversion disorders

c. Reaction formation: One is aware of thoughts and feelings which are counter to unacceptable unconscious impulses

d. Displacement: Redirection of conscious feelings and thoughts toward a "safer" object, than the one that caused the stress

IV. Mature Defenses: common in healthy adolescents and adults and synthesize impulses, conscience and reality

a. Sublimation: process in which impulses are modified and directed into more acceptable channels

b. Altruism: regard for the interests and needs of others

c. Suppression: conscious decision to "put off" or not pay attention to conflict or situation (repression puts it totally out of one's mind)

d. Anticipation: realistic experiencing of both thoughts and feelings associated with future conflict or loss

e. Humor: emphasizing the amusing or ironic aspects of the conflict as a way of dealing with stress or conflict. He does not have a negative impact on others - if it does it more appropriately belongs to passive-aggression or displacement.

V. Daniel Levinson
-Developmental periods in the eras of early and middle adulthood.

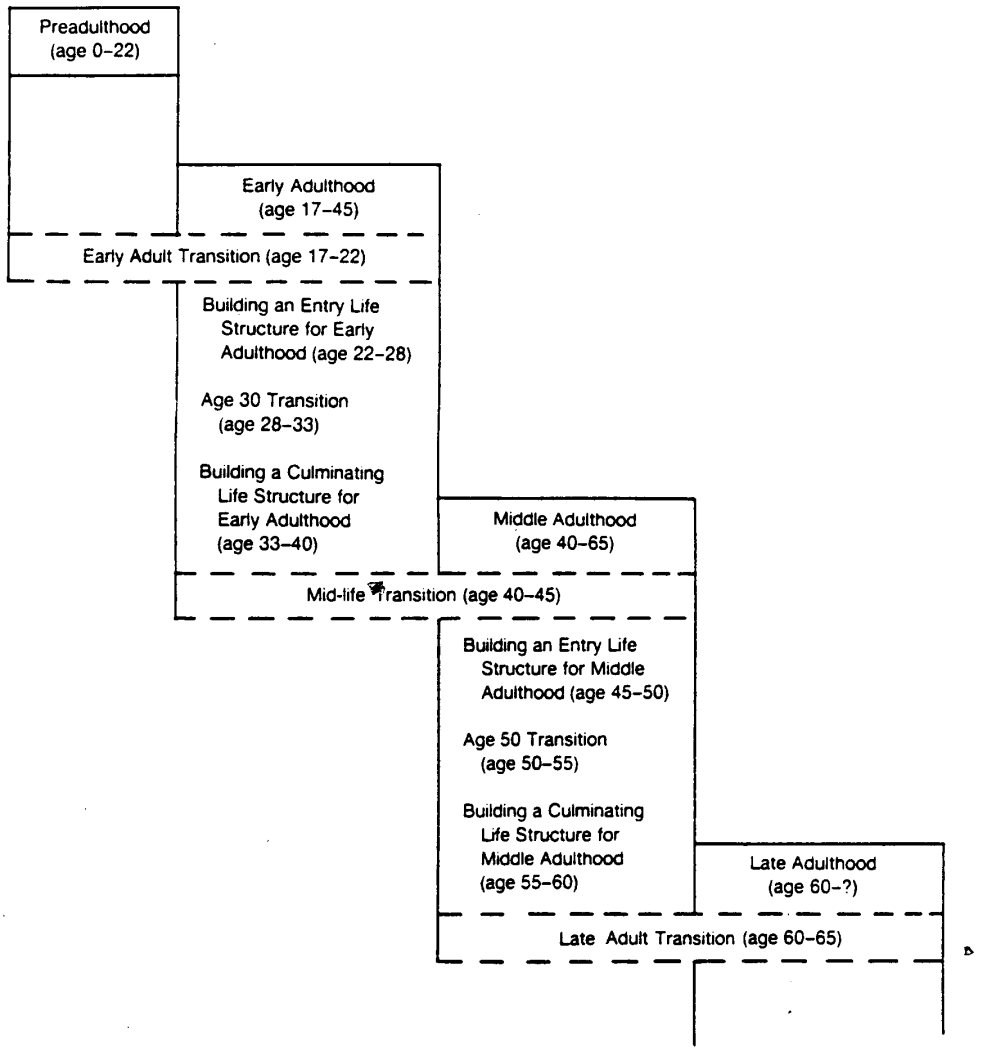

FIGURE 1.1–1. *Developmental periods in the eras of early and middle adulthood. (Adapted from Levinson D J, with Darrow C N, Klein E B, Levinson M H, McKee B:* The Seasons of a Man's Life. *Alfred A Knopf, New York, 1978.*

VI. Erik Erikson: "Revision" of epigenetic life cycle model to a "life-spiral" model.

VII. Criticism of developmental models of adulthood are presented.

Lecture Notes

Human Behavior Course
2004

CHILD DEVELOPMENT
(Six Lectures)

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Professor of Psychiatry
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CHILD DEVELOPMENT - SLIDES

LEARNING OBJECTIVES & ISSUES FOR THOUGHT.

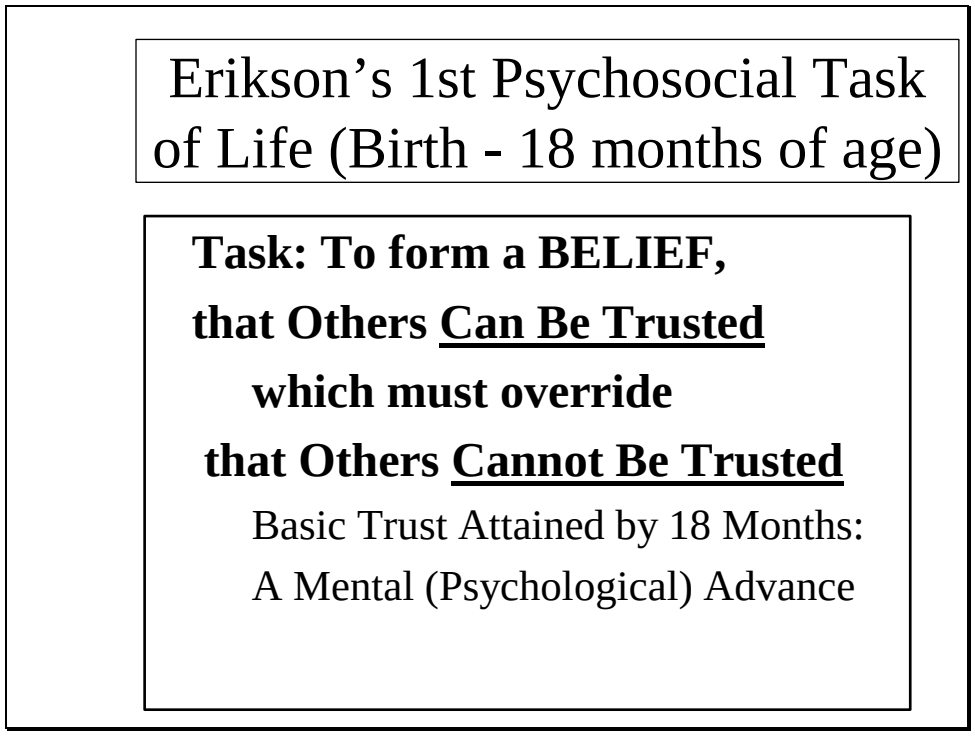
1. Describe normal development in various age groups to include milestones and evidence of normal outcome.

2. Describe mechanisms of biopsychosocial development as they occur in childhood and adolescence.

3. Define major psychiatric disorders that occur during childhood and other disturbances in social, psychological, or occupational function that result from pathological development from birth through adolescence.

4. Know key examples of normal and pathological development, some of which may be in your own life and family.

Slide 1



Slide 2

Psycho-Social Task for Infancy

Def.: A task that begins with a social input and which stimulates the mind and leads to
mental (or psychological) development

Social Stimulation: A whole collection of parental behaviors which communicate to the infant - “Trust us”

Psycho-logical Task: The Mind of the Infant is Gradually Changed Through Developing and Storing the Belief - “I trust my parents”

Slide 3

The Attachment Relationship

Unique type of relationship developing between infants and parents necessary for the infant to generate, store and continually develop psychosocial tasks

Slide 4

The Attachment Relationship

Infants **Actively** Influence the Attachment Relationship through
innate capacities
(present at birth)

innate = genetically derived

Slide 5

Infant is Endowed with the Capacity to Generate Emotions

- Infant is a stimulation "receiver"
- Stimulation levels generates **particular feelings**
- Infant can generate the feelings of happiness, sadness, interested excitement, assertive anger, fear, irritating boredom and destructive rage

Slide 6

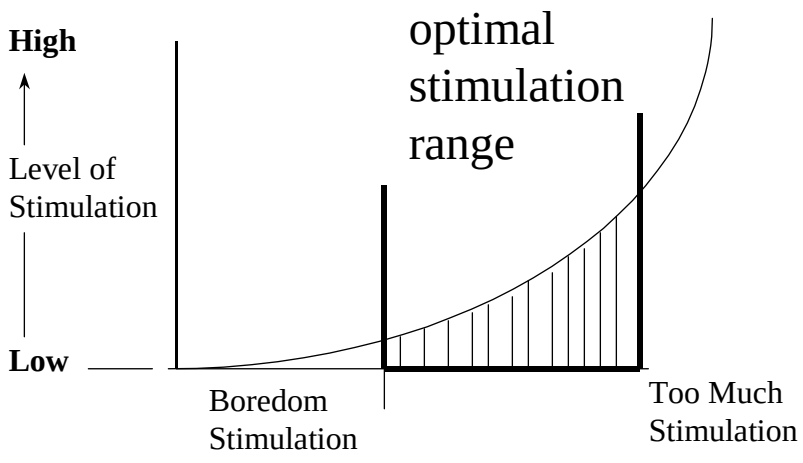
Feelings or Emotions: The Principal Motivators for Behavior

The Human Infant is programmed by his or her genetic code to act and react in ways that

- maintain pleasurable feelings and
- avoid unpleasurable feelings

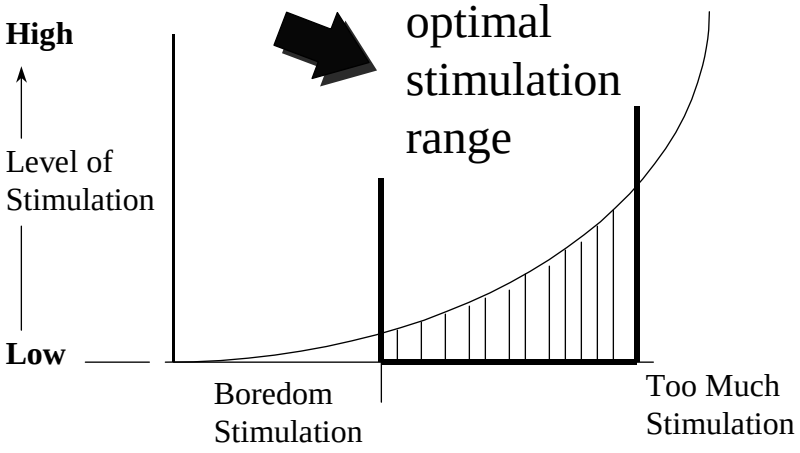
Slide 7

- <u>Each</u> infant is innately endowed with his or her own



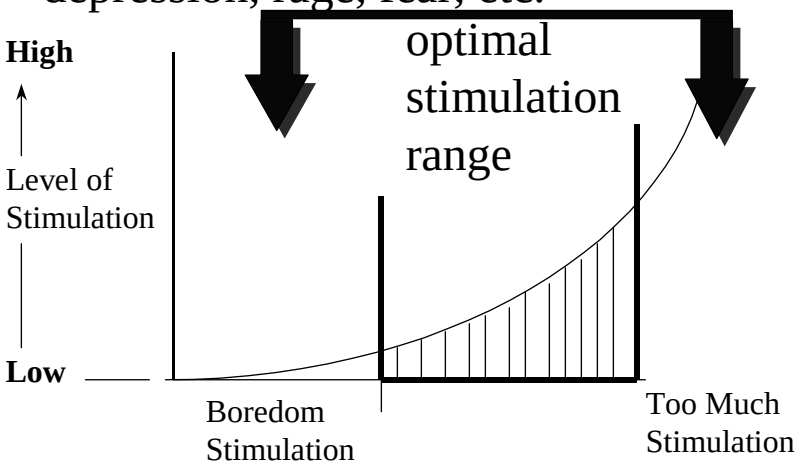
Slide 8

- **<u>Pleasurable Emotions Generated When Within Op. Stim. Range:</u>**
  happiness, interested excitement, assertive anger



Slide 9

- **Unpleasurable Emotions Generated When Outside Op. Stim. Range:**
  depression, rage, fear, etc.



Slide 10

Infant in Endowed with the Capacity to Signal Where the Infant is in Reference to His/Her Optimal Stimulation Range

Within the infant's stimulation range: infant expresses facial, oral and bodily signs of experiencing

pleasurable emotions,

e.g. smiling, cooing, gaze focussing, touching the mother's face, etc.

.

Slide 11

Infant's "Hard Disk"
Programmed to Generate
Behavioral Signals of Distress:

Infants generate **unpleasurable feelings** in reaction to

- highly **over**-stimulating
- highly **under**-stimulating experiences

and **respond with**

Slide 12

Innate Behavioral Signals of Distress

- Crying
- gaze aversion
- "flight-fight" responses:

(pushing away, turning)

Slide 13

So What Are the Sources of Stimulation for the Human Infant?

A. The Infant is Passive With Little Interest in the Parents and Environment Other Than to Be Allowed to Sleep, Be given Food, and to Be Kept dry, Clean and Warm

B. The Parents Are the Only Sources of Stimulation for Their Infant

C. The infant actively seeks stimulation from the parents and the infant is his or her own source of stimulation

Slide 14

Infant Capacities to Seek and Receive Parental and Other Environmental Stimulation

Infant innately endowed with Pre-Programmed Sensory and Perceptual Capacities

Slide 15

Infant Visual Perceptual Capacities

Pre-programmed **perceptual bias** to attend to human **facial stimuli.**

Slide 16

Infant Auditory Perceptual Capacities

Pre-programmed
perceptual bias
to attend to the
sounds of human voices.

Slide 17

Infant Capacities to Seek and Generate Self-Stimulation and Parental Stimulation

Infant innately endowed with the Capacity to
Activate Innate Needs

Slide 18

Innate Need to Gratify Physiologic Requirements

Such as maintaining
bodily regulation
e.g, temp. regulation and
physical survival
e.g. food, sleep

Slide 19

Innate need to attach

to *at least*
one person
in a predominantly
emotionally pleasurable relationship.

Slide 20

Innate need to be assertive

- In **exploring** the social environment
  In **seeking** novel stimulation in order to learn

Slide 21

Infant's Innate need to be Assertive

fuels and is supported by infant's innate and maturing **Cognitive (or Intellectual) Abilities**

Slide 22

Major Postulates of Piaget

Infants **acquire intelligence**
by using their innate need
* to be ***assertive in acting and reacting***
to people and things

Slide 23

Major Postulates of Piaget

Schema or mental representation

- basic intellectual cognitive unit
- formed when infants'

integrate and comprehend

perceptions, thoughts, emotions and memories (once they begin to be formed and stored)

Slide 24

New knowledge is Acquired through infant's storing a new or recently revised representation

as a

long-term memory

(new knowledge "stored" on their brain "hard disks")

Slide 25

Assimilation - Infant Mental Process of "Fitting"

a **novel perception**

into an old memory
or

existing schema

Slide 26

Accommodation -Infant Mental Process of

(1) **restructuring**

pre-existing memory (representation)

(2) and **forming** a

new revised memory

Slide 27

Completed **Assimilation and Accommodation** produces ***mastery smiles*** *within infant*

mirroring smiles of the parents

Internalized

Growth of Infant's Self-Esteem

Slide 28

Infant Capacities that Modify the Quantity and Quality of Stimulation That the Infant Perceives

Infant is innately endowed with

Temperamental Capacities

Slide 29

Temperament

S*tyle* of an infant's behavior

Slide 30

Infants' Behavioral Style Will Fall On:

- **Quantitative Dimension of Assertiveness**
  - **extreme shyness**
  - **uninhibited assertiveness**
- **Qualitative Dimension of Self-Soothing**
  - **difficult emotional regulation**
  - **easy emotional regulation**

Slide 31

Temperamentally Easy Infant

Joyfully and assertively approaches

new or novel situations

Slide 32

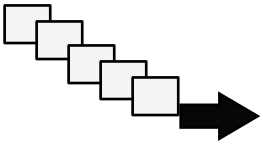
Temperamentally Slow to Adapt Infants

- New or Novel Situations

  Initially experience

  moderate fear ⟵ withdraws

  then approaches

   tentatively

Slide 33

Temperamentally Difficult Infant

New situation ⟵ ***high and sustained fear***

warding off behaviors

"Flight/Fight Response"

Parental holding-modulating necessary for infant's exploration

Slide 34

Attachment Relationship Between **Infants and Their Parents**

Slide 35

Earliest Attachment with Mother

- Mothers, in using empathy and their knowledge of infants to tune into the infant's stimulation level,

  are more soothing, calming and enveloping than fathers

- Mothers are stimulating but more tuned into helping their infants "get back into" the infant's ***optimal stimulation range***

Slide 36

Earliest Attachment with Mother

Mother also socializes her infant in teaching infant how

- to assimilate and accommodate to ***developmental tasks***
- in this interactional process, the mother becomes, for her infant ***an object of identification***

Slide 37

Infants seek sensual / sexual stimulation - gratification

through pleasurable stimulation of their ***oral mucosa***

Slide 38

Freud's First Stage of Psychosexual Development

"Oral Stage"

Infants' use their mouths

to explore and learn

about their **bodies**

about their **social world**

of people and things.

Slide 39

Earliest Attachment with Father

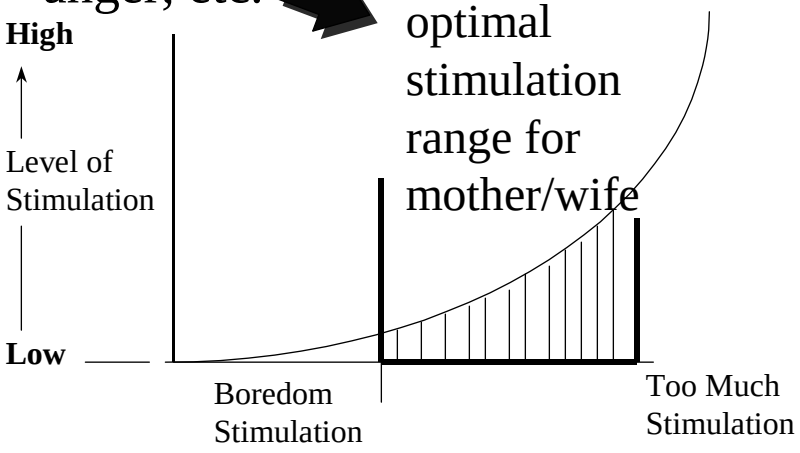
- ***Indirect Role of Father***

To foster infant's attachment to his wife by, -
helping his wife to remain within her stimulation range

- by giving his wife admiration for being a mother, and
- by providing physical and emotional intimacy

Slide 40

- **<u>Pleasurable Emotions:</u>** happiness, interested excitement, assertive anger, etc.



Slide 41

Earliest Attachment with Father

Direct Role of Father

- To foster infant's attachment to himself by using empathy and knowledge to tune into infant's stimulation level and help infant to get back into infant's stimulation range
- By socializing his infant in teaching infant how to assimilate and accommodate to ***developmental tasks***

Slide 42

Indicators of a Healthy Attachment: 1. Infant Social (Selective) Smile

Given preferentially to both parents by **3 months** (as early as 4 weeks)

Slide 43

Indicators of a Healthy Attachment: 1. Social (Selective) Smile

Given preferentially to both parents by **3 months** (as early as 4 weeks)

Slide 44

Indicators of a Healthy Attachment
2. Stranger Anxiety

Emerges at

5-6 months

A prominent developmental anxiety from

8 months to 2 1/2 years.

Slide 45

Stranger Anxiety

When a stranger appears, infant shows

- **Fretfulness**
- **Reaching out**
- **Seeking proximity to parent**

Slide 46

Stranger Anxiety

Before age 5 - 6 months

no fear of strangers

Slide 47

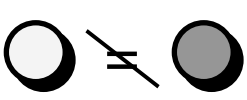
Capacity for Stranger Anxiety

At 5 - 6 months

maturation of cognitive capacity to **retrieve memory** of mother's face

and

mentally compare mom's face with the face of a stranger



= Stranger Anxiety

Slide 48

Indicators of a Healthy Attachment

3. Separation Anxiety

Beginning at 8 months of age,

A predominant **developmental anxiety**

- Emerging as a result of the maturation of infant's cognitive ability to
  (1) **perceive parents' absences**
  (2) **mentally evoke memories**
  (3) **generate expectations**

Slide 49

Separation Anxiety

Infant

(1) remembers and

(2) generates expectations

about what happens during parent's

absence and ***return***

Slide 50

Emotion of Anxiety

Internal warning signal -

within a memory - that

(1) highly unpleasurable overstimulation or understimulation may occur

(2) and although signaling or fight/flight may be difficult

(3) the child believes that acting - speaking will decrease the anxiety and lead to a sense of mastery

Slide 51

Erikson's 1st Psychosocial Task of Life (Birth - 18 months of age)

Task: To form a BELIEF,

that Others Can Be Trusted

which must override

that Others Cannot Be Trusted

Basic Trust Attained by 18 Months:
A Mental (Psychological) Advance

Slide 52

The Attachment Relationship

Unique type of relationship developing between infants and parents necessary for the infant to generate, store and continually develop psychosocial tasks

Slide 53

Developmental Phase of Toddlerhood

(18 Months - 3 Years)

Major Developmental Tasks

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Toddlerhood: Major Developmental Tasks

- **One Psychosocial Task**:**To form the Belief that Autonomy is Good**

  "I am a separate individual who can <u>begin to</u> think, feel, act on my own"

  - i.e.., <u>to begin</u> to develop an **autonomous identity** (or sense of self)

Slide 55

3 1/2 year old boy

- Since beginning at age 18 months-he has been demonstrating a belief that he could be <u>autonomous</u> and still <u>trust</u> that his parents will <u>value</u>, <u>protect</u> and <u>love him.</u>
- He asserts himself and removes the tape from the puppet's mouth - this is not right, since he believes a child should talk

Slide 56

Toddlerhood: Major Developmental Tasks

(18 Months - 3 Years)

- **Another Psychosocial Task : To form the Belief About One's Gender**
  - **For males: "I am a boy"**
  - **For females: "I am a girl"**
  - i.e., to begin to develop a ***gender identity***

Slide 57

One Task of Toddlerhood: Developing Autonomy

Parents encourage autonomous exploration while being available *but*

Parents concurrently place ***limits*** on the child's ***assertive will.***

- Parents threaten/initiate **separation *(generating separation anxiety)*** to shape toddler's **assertive will**

Slide 58

One Task of Toddlerhood: Developing Autonomy

Parents titrate how much **separation anxiety** is tolerable to the child

Right amount of separation: toddler learns that when he or she acts in a certain way, that the parents will take away their involvement (separation). Toddler learns parents rules about autonomy.

Too long a separation: toddler can experience separation panic and secondary rage

Repeated episodes of rageful panic: the toddler's development of autonomy is greatly inhibited as autonomy generates memories of rageful panic

Slide 59

One Task of Toddlerhood Developing Autonomy

Developed Belief About Autonomy

Normogenic Belief: *"It's good to explore and be an individual even though I sometimes have separation anxiety"*

Pathogenic Abnormal: ***"Exploring - being separate - is too dangerous (intolerable separation anxiety) So I will be passive and inhibited".*** Sith

Slide 60

Social Task of Toilet Training: Another Opportunity for Development of Autonomy

- Around age 2: a maturational advance in **sphincter control**
- Toilet training -

  parental social tasking *to help toddler to further learn how to be autonomous in the family/society*

Slide 61

Freud's Anal/ Urethral Phase

- **Toddler - experiences**
  sensual pleasure
  in anal and urethral activities
- **Elimination activities**
- **Exploration activities**

Slide 62

Motivators for toddler to inhibit/ channel anal-urethral pleasure

1. Parent's threaten/activate ***separation*** ***separation anxiety***
2. Toddler's innate need to assertively develop ***body mastery***

Toddler's mastering the "pot" generates ***mastery/mirroring smiles***

Slide 63

Regressions in Development

- Expectable **"flights" back to earlier ways of behaving - a "time out"**
- occur when toddler is experiencing highly **unpleasurable emotions**

Slide 64

Regressions in Development

Normal Regressions: Short-lived - when toddler's stimulation level returns to optimal stimulation range

Chronic Regressions: Occur when too much or too little stimulation is maintained

• Regressive behavior establishes optimal stimulation range

• Chronic Regression interferes with resuming developing tasks

Slide 65

Process of Identification

An innate capacity in toddler to

(1) model his or her behavior on the behaviors of the parents when these behaviors help toddler to stay within his or her Optimal Stimulation Range

(2) assumes that if he or she **shares** certain qualities ("I am my father's son")

(2) then toddler **automatically** believes that he or she shares **other** qualities with the parents that are **not** necessarily **directly experienced**

("I am good at throwing a baseball like my dad")

Slide 66

Another Task of Toddlerhood: to Form a Gender Identity

Gender Identity: toddler's belief about what his/her anatomical sex means: **"I am a boy,"** **"I am a girl"**

Slide 67

Early Building Blocks of a Developing Gender Identity

- Innate biological, fetal predisposition
  - → **masculanization**
  - → **feminization**

Slide 68

Early Building Blocks of a Developing Gender Identity

- Parent's appropriate sex identification at birth
  - i.e., giving infant a **culturally appropriate name**
    e.g., Coun./western song: "A Boy Named Sue"

Slide 69

Early Building Blocks of a Developing Gender Identity

- Parents, siblings, teachers, etc. teach attitudes, beliefs about what behavior constitutes

  being a boy

  being a girl
- Also teaching which behaviors belong to **both boys and girls**

Slide 70

Toddler's Early Genital Phase
(1 to 2 1/2 Years)

- **Genital self stimulation**
  (13 months ⟹ **)**
- **Curiosity about anatomical differences**
  (18 months **)**
- **Interest in viewing opposite-sexed genitals** (22 months)

⟹

Slide 71

Belief in One's Gender Identity

Formed by **2 1/2 years: child's gender identity** is now "saved" on toddler's brain "hard disk"

- This belief, once formed, must be continuously
  supported: "You are a girl"
  developed: "Girls behave this way....etc"

Slide 72

Early Childhood

(Age 3 Until 6 Years)

Major Developmental Tasks of Early Childhood

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Developmental Tasks of Early Childhood: 3 - 6 yrs.

To Form a Belief About One's Sexual Identity

To Form a Belief About One's Peer Identity

To Form a Set of Beliefs Defined as a Conscience

To Form a Belief that Curiosity - in behavior and thinking - is a Good Thing

Slide 74

Erikson's 3rd Psychosocial Task of Life (3 - 6 Years):Curiosity

Developmental Task: To form the Normal Belief

"To be curious is good and if my curiosity causes me to feel separation or body damage anxiety, I can handle it with my parents help"

<u>versus forming the abnormal belief</u>

"To be curious is a bad thing because curiosity has caused me to experience

- **intense, unbearable separation anxiety, and/or**
- **intense, unbearable body damage anxiety**

Slide 75

Cognitive (Intellectual) Maturation and Development

(Age 3 - 6 Years)

Slide 76

Thinking Becomes Less Reliant on Sensory Perception

Out of sight ≠ Out of mind

By age 3: child begins to learn through ***deferred imitation***

- Child observes new behaviors in others, stores a memory of the behaviors and imitates them at a later time

Slide 77

Cognitive Maturation:Emergence of the Ability to Symbolize

Symbolization **-** the child now has the capacity to endow an object with

qualities and meaning

it does not inherently posses

e.g., child understands his parent's military collar insignia

Slide 78

Cognitive Maturation: Emergence of the Ability to Form Fantasies and Use Them in Place of Action

- The capacity emerges to generate fantasies and to use them to replace real life experiences
- Child discovers that he or she feels happy thinking about going to the park the next day.
- Fantasy is pleasurable in itself!

Slide 79

Forming Symbolic Fantasies

- Child's symbolic capacity enables child to use Toys and to form symbolic fantasies in using toys
- e.g. toy soldiers, warriors
- Play now involves peers in shared fantasy play

Slide 80

Developmental Tasks of

Early Childhood: Peer Identity

To Form a Belief (stored as a long term memory) of possessing a:

Peer Identity: Defined as a set beliefs and fantasies defining

(1) the **rules** by which child interacts and engages in **cooperative peer play**

(2) how child **negotiates conflicts** with child's peer group

Slide 81

Functions of Fantasy Formation

1.To Achieve Pleasure and Vicarious Gratification

- **by using symbolic fantasies to**
  - **structure physical play, alone and with peers**
  - **spend time in private thought**

Slide 82

Functions of Fantasy Formation

As a Mechanism to Delay Action

- to ***delay*** the expression of a wish
  to ***think*** about options when the direct gratification of the wish will cause child to experience

  intense separation/body damage anxiety

Slide 83

3 1/2 year old boy

- Constructs a defensive fantasy: he is putting "poopy" in a baby's eyes and then the baby will get a spanking, not he.
- He, in reality, wanted to hit his baby sister but he already knew that this hitting would get him a spanking
- He enjoys his fantasy and it keeps him out of trouble

Slide 84

Emergence of Spoken Language

- At about 18 months
  emerging ***innate capacity*** to
  comprehend/express
  speech

Slide 85

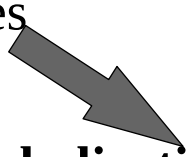
Emergence of Spoken Language

- Toddler normally learns that parent's
  words = truth

Slide 86

Overall Rule in Language Acquisition

Comprehension
Precedes



Verbalization

Slide 87

Verbal Language Development

- Child knows
  what something is
    before child knows
      how to say it

Slide 88

Verbal Language Development

- By age 2 years
  - Child's vocabulary is about 50 words
- By age 5 years
  - Child's vocabulary is over 2,000 words

Slide 89

Verbal Language Development (Age 3 - 6 Years)

Speech becomes a major aspect of how child demonstrates aspects of his/her

- **ever developing autonomous identity**
  "I can dress myself"
- **ever developing gender identity**
  "I'm Lily and I'm pretty"
- **newly emerging sexual identity**
  John: "I want to go to the try-on rooms with mom"

Slide 90

2 year old girl

- Demonstrates her new found language ability
- Her mother smiles proudly, encouraging Amanda's continued use of language to become more assertive and autonomous

Slide 91

Speech as a Trial "Action"

From age 3 - 6, parents slowly help child to go from ***action dominance***

to ***verbal dominance***

in child's expressing wishes and feelings

verbalizing before acting - is

supported by the parents/others

Slide 92

Sexual Identity Development
(Age 3 - 6 Years)

For the heterosexual child, identification with the like-sexed heterosexual parent guides

the ***heterosexual*** child's making a ***sexual object choice***

Slide 93

To Form a Long Term Memory of a:

Sexual Identity

Defined: a collection of beliefs and fantasies that reveal

(1) who and how child seeks/gratifies **sensual/sexual gratification**

(2) how the child **prohibits** such gratification based on the **rules** of family and society

Slide 94

Sexual Identity Development
(Age 3 - 6 Years)

Discovery of anatomical sexual differences between boys and girls (2-4 years) coincides with

child's discovery that

life may involve

physical injury and pain

Slide 95

Sexual Identity Development
(Age 3 - 6 Years)

Body damage anxiety

("castration anxiety" - Freud)

the **prominent development anxiety**

for 3-6 years of age

Slide 96

Sexual Identity Development
(Age 3 - 6 Years)

- Now child experiences **stranger anxiety, separation anxiety, and body damage anxiety**
- Anxieties are **conscious**
- Anxieties **generate thinking, feeling and action**, **not** just a panic, fight/flight reaction or defense mechanisms

Slide 97

3 1/2 year old girl

- She knows about certain real life dangers
- Rabies in an animal can hurt you
- She tells us that she has body damage anxiety in thinking about a rabid animal
- But her anxiety is manageable - she believes she can run away

Slide 98

Emergence of the Heterosexual "Oedipal Conflict"

(Age 4 - 5 Years)

Slide 99

Heterosexual "Oedipal Conflict"

- Child fantasizes about more **"sensual-sexual" interactions** with opposite-sexed parent

  e.g., girl fantasizes

  marrying her father

  ⇒ **replacing her mother** as the center of father's attention

  ⇒

Slide 100

5 1/2 year old girl

- Tells me about her dream: she is marrying her father - the edipal wish
- She slaps her mother at the wedding - the aggression towards the rival
- She then wets her pants - a regression and a self-punishment because of her fear of her mother's retaliation

Slide 101

Heterosexual Oedipal Conflict (4 - 5 Years)

Child's fantasies to

replace the same-sexed (rival) parent

generate

body damage anxiety and

separation anxiety

Slide 102

5 1/2 year old girl

- Tells me about her dream: she is marrying her father - the edipal wish
- She slaps her mother at the wedding - the aggression towards the rival
- She then wets her pants - a regression and a self-punishment because of her fear of her mother's retaliation

Slide 103

Heterosexual Oedipal Conflict (4 - 5 Years)

Child experiences an

external conflict

Oedipal fantasies Parental prohibitions

signal anxieties

(sep. + body damage)

Slide 104

Heterosexual Oedipal Conflict (4 - 5 Years)

Child's oedipal fantasies toward rival - when (unconsciously) **projected** - **transient fears** of monsters, large animals, the dark, etc.

Slide 105

5 1/2 year old girl

- Tells me about her dream: she is marrying her father - the edipal wish
- She slaps her mother at the wedding - the aggression towards the rival
- She then wets her pants - a regression and a self-punishment because of her fear of her mother's retaliation

Slide 106

First Resolution of the "Oedipal Conflict" (Age 6 - 7 Years)

- Child relinquishes wishes to occupy same-sexed parent's ***space***
- Child reaffirms his/her **identifications** with same-sexed parent
- Separation-Body Damage Anxieties **greatly diminish**

Slide 107

42 year old man: Burt Reynolds in "The Man Who Loved Women"

- Lying on an analyst's couch: "Why can't I stay in love with a woman?"
- Recalling his interest in his prostitute mother's activities, while denying his lust for her
- He never gave up his edipal wishes towards her but now has extreme guilt about them
- As an adult he kept finding good women but then loses interest in the woman - he punishes himself for his incestual lust

Slide 108

Developmental Tasks of Early Childhood: Conscience

To form a ***Superego or Conscience***

- ***Defined as a set of rules about* "good" and "bad"** behaviors
- These internal rules enable child to assertively decide how to behave relatively **independent** of the parents' and other adults' presence

Slide 109

1st Phase in Development of Superego or Conscience (Age 1 - 3 Years)

- Toddler learns parents' rules about **standards of behavior**
- Parents' **rules** inevitably conflict with toddler's **needs - wishes**
- Child **obeys** parents to alleviate separation-and later - body damage anxieties

Slide 110

"Home Alone"

- "Toddler learns parents' rules about **standards of behavior"**
- **This boy believed the parents' rules were unfair**
- **He rejected internalizing these rules and had no guilt in torturing the "robbers"**

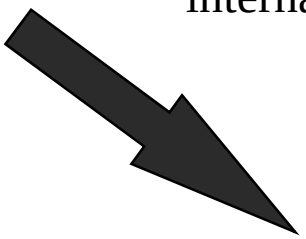
Slide 111

2nd Phase in Development of Superego or Conscience (Age 3 -6 years)

Parents' rules about

standards of behavior

internalized



become part of child's conscience

Slide 112

New Signal Anxiety: Superego Anxiety

When child ***thinks-fantasizes about disobeying*** internalized rules within one's conscience - child internally perceives a signal of impending **guilt**

Slide 113

After Formation of the Superego or Conscience (collection of long-term memories)

Child now experiences:

- **Separation anxiety**
- **Body damage anxiety**
- **Superego anxiety**

Slide 114

Ongoing Superego Development

- **Superego anxiety** - internal signal when child thinks of disobeying his/ her conscience
- **Guilt** - the feeling experienced when child has disobeyed his/her conscience
- **New Internal Motivator** - to obey one's conscience to avoid feeling the **painful <u>threat</u> of guilt**

Slide 115

As Conscience Begins to Function (Age 3 - 5 Years):

Child <u>needs-wishes</u> conflict with parents' ***external*** rules/prohibitions ***internal*** rules/ prohibitions within child's conscience

Slide 116

After Formation of the Ever Growing Superego or Conscience

Child now ***motivated to obey his/her conscience***

- to avoid guilt
- → to avoid separation and body damage anxieties that accompany guilt

Slide 117

Late Childhood (6/7 - 11 Years) Major Developmental Tasks

To establish a ***peer and social identity***

a boy/girl who can assertively perform in the world of peer and other adults

Erikson Psychosocial Task:

"I can be **industrious** and feel good" versus

versus "I can't perform, I'm **inferior**" - this latter belief is often denied and hidden beneath "I don't need to perform with peers"

Slide 118

WW II Combat Soldier on a Psychiatric Ward

- In psychiatric ward after he witnessed the death of his buddy - has repressed the event
- Acting arrogant and alienating himself from peers - this is a sign of low self-esteem and possible guilt about what happened to his friend
- Army psychiatrist confronts this behavior as a defense and demands respect for himself and for this soldier to respect himself

Slide 119

The "Age of Reason": Age 6-7

- Late middle ages (500 - 1300 AD.) - age 7 years: **court page**
- Renaissance Guild System in Europe (1300 - 1600 AD.)

  age of 7 years: **trade apprentice**

Slide 120

The "Age of Reason"

- Catholic Church
  6 -7 years of age: **Holy Communion**
- 20th Century
  6 -7 years of age: - **Formal grade school** begins throughout the world

Slide 121

Piaget's Operational Stage of Cognitive Development (Age 6 - 11 Years)

Capacity for Mental Operations

Slide 122

Mental Operations

Internalized actions

7 year old can now **mentally classify objects** according to similarities and differences, without the need to **physically manipulate the objects**

Slide 123

Piaget's Operational Stage of Cognitive Development (Age 6 - 11 Years :

- ***Child's mind has new capacity to understand reversible mental operations***

  e.g., $7 \times 7 = 49$

  then $\frac{49}{7} = 7$

Slide 124

Piaget's Operational Stage of Cognitive Development (Age 6 - 11 Years :

Ability to understand ***the concept of conversation***

i.e., **mass remains constant**

50 lbs. = 50 lbs.

Slide 125

Verbal Language Development

- Child's talks *instead of immediately acting* in dealing with wishes, needs and anxieties
- ***Speech dominance*** increases child's ability to ***delay action and talk about options***

Slide 126

Verbal Language Development

- At about 7 - 8 years, gradual transition ***speech dominance***

  → ***thought dominance***
- Thought Dominance - Child thinks before he/she speaks or acts
- Identifying with parents use of delay and speech motivates child

Slide 127

Continuation of Heterosexual Sexual Identity Development:(Age 6 - 11yrs.

Sigmund Freud's ***Latency Period (Age 6 - 11 Years)***

Freud: Child's sexual wishes/actions in a ***latent*** state

Modern view: sexual wishes/actions ***less blatant*** than they will be in adolescence

Slide 128

Continuation of Heterosexual Sexual Identity Development (6-11 Yrs)

Social Pressure (from adults and peers)

- for boys to act like "boys"
- for girls to act like "girls"

Slide 129

Continuation of Heterosexual Sexual Identity Development (6-11 Yrs)

Each society's definition of boyhood and girlhood communicated by

teachers,

athletic coaches,

religious leaders,

toy manufacturers,

entertainment

celebrities, etc.

Slide 130

Formal Education (Age 6 - 11 Years)

- Grade School: The Primary "work" of childhood
- School: To assimilate/accommodate and acquire new factual knowledge
- School: To assimilate/accommodate and acquire new knowledge about relationships

Slide 131

Formal Education
(Age 6 - 11 Years)

Preparations for School Learning: Developing Basic Beliefs in Prior Phases

From Infancy: "I **trust** my teachers"

From Toddlerhood: "I feel good about being **autonomous** from my parents"

From Early Childhood: "I like being **curious** and **assertively inquisitive**"

Now: "I can be **industrious**, present my work, and I'll do well and be liked"

Slide 132

Process of Self Esteem Development Throughout the Life Cycle

First long term memories of infant/toddler "seeing" him/herself as a good person positive self-esteem develops in a family atmosphere that

(1) encourages infant/toddler's assertive wishes to perform

(2) admires these performances

Slide 133

Self Esteem Development

Child's Performances: Especially When Child Engages in Successful

Assimilation and Accommodation

child mastery smile

child seeks

Parents'mirroring (admiring) smiles

Internalized in child's superego

Growth of Self-Esteem

Slide 134

Self Esteem Development

When school begins, ***performing in the world of peers*** becomes as important as performing for one's parents

- Peer group becomes crucial source of **mirroring smiles internalized within child's superego**

Slide 135

Self Esteem Development

Child also seeks peer group feed-back and guidance about

- How to play by **moral/ethical rules**
- How to **work out conflicts**, e.g., fighting, compromising

Internalized within child's superego

Slide 136

Ongoing Superego Development

Peer Group Play-Conscience Work

- Preoccupation with rules,
  their **rigidity** versus **changeability**
- Child **practices** living by rules he/she has internalized and is constantly modifying within his/her conscience

Slide 137

Ongoing Superego Development

- By 8 - 9 years of age, child
  learns and internalizes a
  moral code of fairness
  in relating to peers
- Parents look for moral - kind peer group for their child

Slide 138

Ongoing Superego Development

Two functions conscience now begins to perform (by about 8 - 9):

(1) To regulate the child's ***behaviors*** relatively independent of external constraints - child maintains

self - control, self - discipline

"I know how to behave because I have a conscience"

Slide 139

7 year old boy

- He is proud to tell me about his knowing about the conflict he must face between good and evil
- He knows that it is not a quick solution but an ongoing, daily "battle"

Slide 140

Ongoing Superego Development

Second function conscience now begins to perform (by about 8 - 9):

When superego is obeyed, the superego becomes a source of ***positive self - esteem,*** relatively independent of external feedback, especially negative feedback

"When I obey my conscience, I get internal strokes and I feel good"

Slide 141

Ongoing Superego Development

- **Superego anxiety** - internal signal when child thinks of disobeying one's conscience
- **Guilt** - the feeling experienced when child disobeys his/her conscience
- **Guilt -** also lowers self-esteem

Slide 142

Normal Superego Functioning

New Internal Motivator

- to obey one's conscience
- to avoid the **painful feeling of guilt and resultant low self-esteem**

Slide 143

Adult Male

- Lies in trying to tell a 5 year old boy's foster parents that the boy is "bad"
- One of the foster parents exposes his lie
- He feels guilty and embarrassed and leaves

Slide 144

Ongoing Superego Development

Role of the Pre - Adolescent Chum (Age 8 - 11 Years):To Make One's Conscience Less Perfectionistic and Unrealistically Critical

- **Child tells chum when the child feels guilty and/or ashamed** when the child has not lived up to the overly high standards within his/her conscience.
- If the chum is "easy" on the friend, the child can begin to relinquish ***unrealistic standards of behavior*** within his/her conscience

Slide 145

Ongoing Superego Development

Role of the Pre - Adolescent Chum

- Child ***tells the chum about the child's failures and limitations***
- If the chum still accepts the child, the child's conscience can begin to become ***less perfectionistic*** and

⇒ ***more accepting*** of the child's performance/ abilities

⇒

Slide 146

4th Major Life Task:

Adolescent Period
(Age 12 - 19 Years)

Slide 147

Task of Adolescent Period

By age 18-19, to form an emancipated identity and continue to develop it throughout life

Slide 148

Emancipated Identity by Age 18-19

A **belief** about one's self (stored as a long-term memory) that defines:

- Being ***emancipated*** from one's parents and significant others

By high school graduation, being able to

- stay out of trouble
- pick the right people for relationships
- stay focused on life goals

Slide 149

Emancipated Identity by Age 18-19

A belief about one's self that defines:

- ***Believing in one's self value*** in possessing both **similar and different** points of view, ideals, and values from those of the parents, teachers, coaches, close friends, etc.

Slide 150

Emancipated Identity by Age 18-19

A self -representation that defines one's self as:

Attaining an appreciation of the progressive ***continuity*** **in one's life between**

past  One's memories affect present thoughts, feelings and actions

present

future

Slide 151

Parent's Role in Facilitating Adolescent's Formation of an Emancipated Identity

- Parents need to be ***consistent*** in expressing their ***values and standards***
- Parents must ***tolerate*** teenager's pronouncements of ***independence***

while

not criticizing teenager's wish to remain ***dependent***

Slide 152

Parent's Role in Facilitating Adolescent's Formation of an Emancipated Identity

- Parents need to encourage teenager's continuing to relate to and learn from ***teenager's peer group***
- ***Parents can not*** be overly competitive with the peer group - teenager will stop emancipation or become rebellious "I don't need you, I have my friends"

Slide 153

Entry Into Adolescence in Most Cultures is Defined as

When Puberty Begins

Slide 154

Puberty

- ***Onset:*** coincides with the measurable somatic landmarks of the emergence of Secondary sexual characteristics

Boys/Girls: Axillary/Pubic Hair

Boys: Penis, testes growth

Girls: Breast growth

Slide 155

Puberty ⟹ Adolescence

- Puberty is an ***act of nature***

while

- Adolescence is an ***era of life***

Slide 156

Adolescence as an Era of Life

Different cultural
"Rites of Passage"
into and throughout
adolescence

Slide 157

"Rites of Passage" Into and Throughout Adolescence

- **Early (12 - 13 years old)**
  - **Boys:** deodorant, athletic supporter, clothes
  - **Girls:** deodorant, bra, clothes
- **Middle (15-16 tears old)**
  - **Boys:** car license, dating, junior prom
  - **Girls:** car license, dating, junior prom

Sexual activity: variable, and very dependent on social context

Slide 158

Menarche

- Mother communicates to her daughter **“Now that you are becoming a woman, I want to help you to respect your developing sexuality. So let’s talk about tampons”**

Slide 159

Menarche

- Mother conveys her support for her daughter’s developing **emancipation and self sufficiency**
- “I’m proud of you that you are taking care of yourself when you have your periods; that you are dressing right and that you ask for my advice about sexual issues when you need it”

Slide 160

Sexual Identity Development

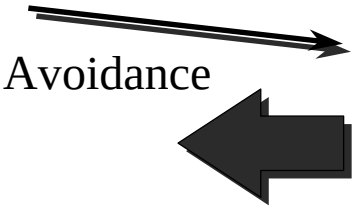
Having previously developed ***more fantasies*** (especially mastubatory fantasies) rather than actual behaviors related to a **sexual identity,** the adolescent embarks upon:

- Developing more
  explicit sex role behaviors

Slide 161

Sexual Identity Development

Heterosexual teen's pubertal physical development



physical and emotional closeness with the opposite-sexed parent

Slide 162

Sexual Identity Development

Oedipally Related Sexual wishes/fantasies toward *opposite-sexed parent* must be
defended against
until they are relinquished

- Displacement of feelings: "crush" on an opposite-sexed entertainment star, public figure
- Hiding one's true feelings: constant arguing with the *opposite-sexed parent*

Slide 163

Sexual Identity Development

In becoming "sexual" and negotiating a "safe" distance with opposite-sexed parent,
heterosexual adolescent's
identification with *same-sexed* parent becomes stronger

Slide 164

Sexual Identity Development

- As dating begins (age 13 - 16 years), teenager ***wants*** parents to ***give mirroring smiles*** in response to teen's becoming more sexually attractive
- Teen's occasionally needs to ***hide his/her mastery smiles*** about looking more sexual

Slide 165

Sexual Identity Development

Negative Effects of Sexual Exploitation by Parent(s) or Others:

- Masturbation can become a

fixed defense

to **protect** teen from feeling

the intense **signal anxiety**

associated with **real** sexual activity with opposite sex

Slide 166

Sexual Identity Development

Negative Effects of Sexual Exploitation by Parent(s) and Others:

- Masturbation - to **replace** any sexual behaviors in front of peers- seriously derails adolescent's developmental process

Slide 167

Sexual Identity Development

Age if initiation of sexual activity:

- Variable, dependent on social context
- 1990-1999 studies:

  60 - 65% of teenagers had experienced intercourse by age 18

Slide 168

Sexual Identity Development

Teenagers invested in

long term educational goals

- Take **sexual energy** and put it into their **books**
- Sexual activity more **delayed** than less educationally impassioned peers

Slide 169

Sexual Identity Development

Parents, teachers, coaches, etc.

protect

- Parents set curfew rules, monitor date choices, etc.

teen from experiencing **excessive heterosexual stimulation**

Slide 170

Ongoing Superego Development

The Two functions of the Superego:

(1) To regulate teenager's ***behaviors*** relatively independent of external constraints - teenager maintains

self - control, self - discipline

"I know how to behave because I have a conscience"

Slide 171

Ongoing Superego Development

(2) When obeyed, superego becomes the internal voice of ***self - esteem,*** relatively independent of external feedback, especially negative -

child internally maintains self worth, leading to self - confidence

"When I obey my conscience, I get internal strokes and I feel good"

Slide 172

Function of Superego as an Internal Regulator of Behavior

As teenager gets older - emancipation is looming - and peer group increasingly assumes a role in **facilitating emancipation** from the parents

Teenager knows he/she will be spending more time with people other than the parents

Parents' rules - previously internalized within teen's superego

become less of an influence

Slide 173

Rebellion Versus Conformity During Adolescence

Moderate adolescent rebellion:

- Fosters formation of an ***emancipated identity***
- through adolescent's ***confrontation*** of parents' and teachers' ***attitudes*** and political and religious ***beliefs***

Slide 174

Rebellion Versus Conformity During Adolescence

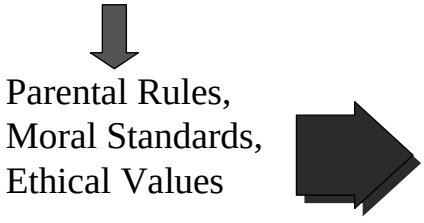
Motives for some people's **overemphasizing** and **idealizing** adolescent rebellion:

- To **foster sales** of teen targeted products, e.g., **cigarette sales, clothes**
- To achieve **vicarious gratification** of an adult's need **to rebel against authority Adult stimulates teenagers' desire for a perfect society, perfect parents, etc.**

Slide 175

Function of Superego as an Internal Regulator of Behavior

In reconsidering parental values conscience becoming **less of a source of behavioral self-control**



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Function of Superego as an Internal Regulator of Behavior

While conscience is weakened

teen seeks isolation alternating with turning to the peer group for help with self-control

Diminished Superego

Assisted by

Peer Group Superego

Slide 177

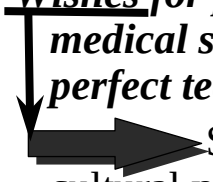
Function of Superego as a Source of Self Esteem

- Adolescent task: to leave home at 18 with a **non-perfectionistic superego = a superego that does not**
  demand perfection
  as the price for internal strokes
- Most teenagers are unaware of wishing that their parents are **perfect and all-powerful protectors**

Slide 178

Function of Superego as a Source of Self Esteem

Wishes for parents, schools (including medical schools) to be perfect and create perfect teenagers or doctors



Stimulated by developmental and cultural **pressures on teen** to become ***emancipated***, e.g., ***make your own decisions***, study for SAT, etc.

Slide 179

Function of Superego as a Source of Self Esteem

- ***De-idealization Process of both parents and other teachers, mentors, coaches:***

necessary for <u>achieving emancipation</u>

alternating pattern of ***idealizing***
and ***de-idealizing***

Slide 180

Function of Superego as a Source of Self Esteem

Great literature's adolescent theme

- Teen's **search** for the perfect person, school, religion, ideology, hero, etc.
- **Loss** of this perfect person causes teen to feel loneliness and sadness

Slide 181

Function of Superego as a Source of Self Esteem

A self-love (or narcissic) stage:

- Adolescent seeks to ***overly admire-idealize*** him/herself as being perfect while being ***overly critical-deidealize*** of his/her imperfections, and
- Adolescent seeks to posses the abilities/attributes he/she admires in **other adolescents**

Slide 182

Function of Superego as a Source of Self Esteem

Adolescent may ***develop a close friendship*** with a same-sexed peer who is admired, because the peer has qualities and abilities **lacking in the adolescent**

Both teenagers together share the fantasy that **together** they make the **"perfect teenager"**

Slide 183

Function of Superego as a Source of Self Esteem

In heterosexual adolescents, in supporting their fantasy that together they could be "everything" - straight and gay - this close friendship ***may*** lead to some

transient and experimental homosexual activity

Slide 184

Function of Superego as a Source of Self Esteem

Normal De-idealization results in teen having a more acceptable view of self, parents, teachers, schools, etc.

- Narcissitc self-love gives way to teen's acceptance of being okay without having to be perfect or serve a perfect protector -

Slide 185

Function of Superego as a Source of Self Esteem

• More realistic self- and other-acceptance is taken into teenager's superego

• Superego now **kinder** and **less demanding** in responding to teen's thoughts, feelings and behavior with internal, self-esteem generating strokes

Slide 186

Illicit Drug Usage

Not always an avoidance of working on establishing an emancipated identity

- Some experimentation with illicit drugs (e.g., marijuana) takes place in a high percentage of teenagers in the service of emancipation

Slide 187

Illicit Drug Usage

Majority of teenagers

will <u>not</u> allow drugs

to chronically interfere with their

Working towards  ***emancipated identity***

"I can try this drug and not become an addict or mess up my school work"

Slide 188

Illicit Drug Usage

Excessive anxiety - as a result of separations (child abandonement)
body damages (child physical abuse)
superego attacks (perfectionistically sadistic parents)

that is ***not*** diminsihed by engaging in **better relationships** can be

Narcotized/Tranqualized/Alcoholized

Slide 189

Chronic Illicit Drug Usage

- Chronic drug usage during adolescence

  greatly interferes with establishing an

  emancipated identity

While high - drunk:"I'm doing lousy in school but I'm not worried about it"(no anxiety)

Slide 190

Transition From Adolescence to Young Adulthood

One Set of Psychological Criteria

Slide 191

Transition From Adolescence to Young Adulthood

One set of 5 criteria to define the end of adolescence (age 18-19)

beginning of young adult functioning (age 20)

There must be

more of the attainment

of each criteria ***than less***

Slide 192

Transition From Adolescence to Young Adulthood

1. Establishment of **Autonomy from Parents**

Attainment of:

- A greater sense of ***control over one's life***
- ***awareness*** of one's ***self-sufficiency***

↓

self-confidence

Slide 193

1.Establishment of Autonomy from Parents

- Parents, teachers are **de-idealized**

↓

Parents viewed more as human beings with **strengths and weaknesses**

Parents viewed more as **advisors, guides and friends**

not infallible sources of truth or tyrants

Slide 194

1.Establishment of Autonomy from Parents

- Superego experienced ***as an inner, more gentle guide*** warning when ethical/moral values are about to be breached
- **Superego anxiety** (signals of impending guilt) is used to guide behavior and make appropriate moral and value choices

Slide 195

2. Establishment of a Realistic Self-Image

Relinquishment of wishes for perfection signified by

- the ability to **set reasonable goals**
- the ability to tolerate **not achieving every goal** (without going into a rage and blaming someone)

Slide 196

2. Establishment of a Realistic Self-Image

Parents, authority figures, and institutions are

- ***no longer blamed*** for whatever imperfections, failures, or limitations the adolescent must face in the pursuit of his/her life goals (or life's dreams)

Slide 197

2. Establishment of a Realistic Self-Image

Adolescent's limitations and mistakes do ***not*** greatly ***inhibit*** the adolescent from

- Continuing to use his/her abilities
- Remaining a commitment to life goals (or life's "dreams")

Slide 198

3. Establishment of a Stable Sexual Identity

- Freshman college student is developing the capacity to make a **mutually caring choice** of a heterosexual partner who treats student with **kindness and respect**
- Sexual activity is **separated** from wishes to **dominate and control** the opposite sex through sexual activity

Slide 199

4.Beginning Resolution of Earlier Life Traumas

Certain adolescents begin to come to terms with ***traumatic events*** from childhood, and give up

holding a grudge

forever blaming parents (or others)

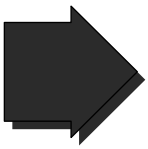
for suffering these traumatic events

Slide 200

4.Beginning Resolution of Earlier Life Traumas

18 year old girl

- suffered the ***childhood trauma of being raped at age 10 -***



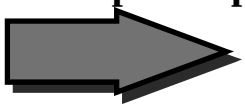
trauma became the motivating force to become a child psychiatrist

Childhood trauma is turned into a success

Slide 201

5.Establishing Continuity Between Past Life Experiences and Current "Dreams" and Attitudes

- Emerging self-awareness of the influence of **past experiences** on teenager's



present wishes, feelings, life dreams, beliefs, etc.

- Process helped by seeking out life histories of **self** and **family members** to help understand present attitudes, goals, etc.

Slide 202

5. Establishing Continuity Between Past Life Experiences and Current "Dreams" and Attitudes

- Not many attain the belief in the **influence** of one's **past** and repressed memories of one's past on present perceptions, etc.
- Many relegate their childhood past and its memories to, as one medical student put it, "***a museum I never intended to visit***."

Slide 203

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Slide 204

Normal Child/Adolescent's Dealing with Separation/Body Damge/SuperegoAnxiety

Anxiety - an internal warning signal that

(1) highly unpleasurable overstimulation or understimulation <u>may occur</u>

(2) and although signaling or fight/flight <u>may be difficult</u>

(3) acting - speaking in a certain way will <u>decrease</u> the anxiety

Slide 205

When Separation/Body Damage/Superego Anxiety

- **is too excessive (outside stimulation range) and**
- **child/adolescent believes that signaling or fight/flight is impossible and that acting - speaking will <u>not decrease</u> the anxiety**

defense mechanisms activated

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Def: Defense Mechanisms

- ***Are unconscious processes which***

(1) automatically bar from consciousness

(2) perceptions, thoughts and feelings

(3) that are stimulating highly unpleasurable levels of anxiety

(4) child/adolescent's mind relgates these mental contents to the unconscious domain

(5) child/adolescent's "colors" his or her perceptions - a misperceiving of reality

Slide 207

Maturational Emergence of *Defense Mechanisms*

Slide 208

Defense Mechanisms

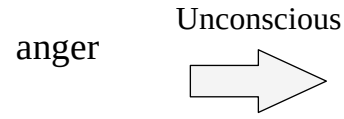
Emerging
Birth - 3 Years

Slide 209

Projection

Automatic attributing to another

- **a wish an/or feeling**
- **causing a too high degree of stranger and/or separation anxiety**



Baby percieves high degree of anger towards the mother

Baby now "perceives" less anger in the mother

Slide 210

Regression

- To rid experiencing highly unpleasurable stranger/separation anxieties associated with current thinking/behaving
- **18 month old: "I want that new thing!"** And toddler perceives mother's facial look of hatred.

Slide 211

Regression as a Mechanism of Defense

- Regression automatically occurs
- Toddler returns to a developmentally earlier mode of thinking/behaving

18 month old: "I want you to hold me mommy" Toddler now perceives mother's smile.

Slide 212

6 year old girl

- Severe regression in speech and behavior.
- Intense anxiety about telling people that her father sexually abused her - her mother forbid her talking.
- Regression as a defense mechanism to ward off the anxiety of being a 6 year old with rage towards her father - now she is a “baby” who has not been sexually abused

Slide 213

Relinquishing Defense Mechanisms

Defenses become transient

- when parents use empathy/intuition to sense when toddler is avoiding an issue
- when parents take time to listen

Defenses become fixed

- when parents want toddler to avoid an issue
- when the defense bars recall of a traumatic memory and the toddlers mind maintains the defense

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Relinquishing Defense Mechanisms

Defenses become transient

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Defenses become fixed

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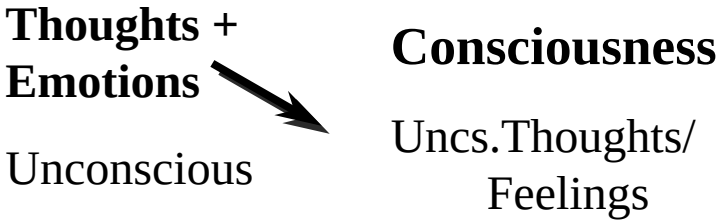
Slide 215

Defense Mechanism Development

Repression - age 18 months onward

- Automatic (i.e.,unconsciously activated) barring from consciousness **intensely unpleasurable thoughts, emotions or memories of same**



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Defense Mechanism Development

Repression "silently" influences child's **perceptions, attitudes, beliefs** and **resultant feelings**

(1) slips of the tongue

(2) automatic actions

(3) attitudes, beliefs, feelings without conscious data

Slide 217

25 year old woman

- In psychoanalysis - she has repressed her sexual wishes towards her psychoanalyst
- She has a "slip of the tongue" in describing an author "Saul Bellow" as her ideal lover
- Her analyst's name is Saul

Slide 218

Defense Mechanism Development

Displacement

- Automatic (i.e., unconsciously activated) switching (or displacing) from consciousness **intensely unpleasurable anxieties** stimulated by a person/situation ***onto*** another person or situation

I'm in a rage at my father and I'm loosing self-control

"You used to be my friend but now you are a jerk,etc."

Slide 219

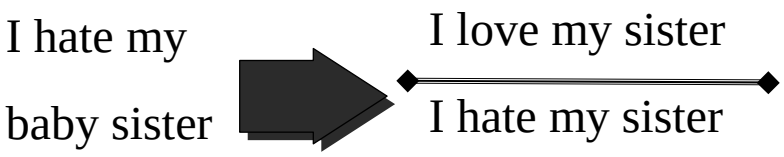
A Mother's Using Displacement and Projection in Relating to Her 2 3/4 yr old girl

- Mother's chief complaint: "My child demands and we all must obey."
- Mother is not aware of her use of displacement: she is displacing her rage at her husband onto her daughter -
- And then projects her rage into her daughter
- Now the mother "perceives" her daughter as possessing an inner rage. So mother must give the daughter everything she demands

Slide 220

Reaction Formation

- Automatic (i.e., unconsciously activated) barring from consciousness feelings that are causing **intensely unpleasurable anxieties**, while inserting into consciousness an opposite feeling and/or thoughts



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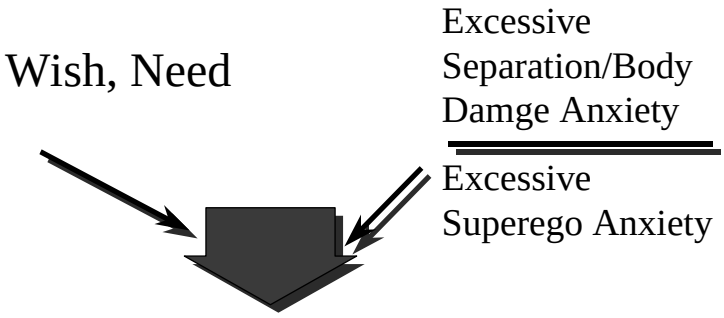
Fantasy as a Defense Mechanism



Conscious/Unconscious
Fantasy to "Solve" Highly
Anxious Conflicts

Slide 222

Fantasy Formation

Used to deal with ***internal conflicts*** (involving one's conscience)

and ***external conflicts*** (involving people)

Slide 223

Fantasy as a Defense Mechanism

Fantasies can become a

chronic "internal escape"

from an **intolerable external reality**

- e.g., child who is being chronically
  over -stimulated
  physically traumatized
  severely criticized

Slide 224

Sexually Abused Boy

- Abused by a male babysitter when he was 5 1/2, babysitter was 16 years old
- Initially did well but 5 months later, he is now depressed, “Dracula” (fantasy formation) is after him in his dreams and he wants to stay at home
- His father has created an intolerable degree of superego anxiety for this boy - his father is blaming his son for the abuse because the father can not tolerate his rage at the abuser

Slide 225

Another SexuallyAbused Boy

- Father is in a rage at abuser but instead of criticizing his son this father acts out his rage
- Local police silently support the father’s murder plot at the airport by allowing father to get close to the abuser

Slide 226

Relinquishing Defense Mechanisms

Defenses become transient

- when parents use empathy/intuition to sense when toddler is avoiding an issue
- when parents take time to listen

Defenses become fixed

- when parents want toddler to avoid an issue
- when the defense bars recall of a traumatic memory and the toddlers mind maintains the defense

Slide 227

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Human Behavior Course
2004

PART III

ASSESSMENT

Human Behavior Course
2004

Diagnostic Assessment & Biopsychosocial Formulation

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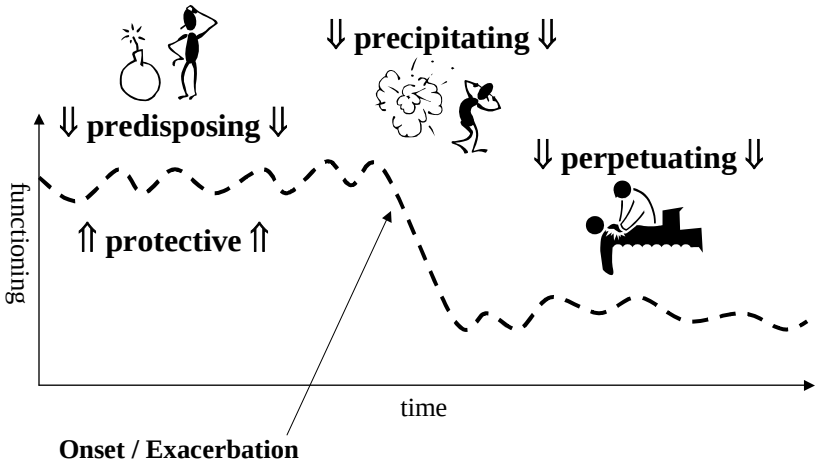
HUMAN BEHAVIOR COURSE 2004
EVALUATION, DIAGNOSIS & FORMULATION - READING

This reading is your first exposure to the notion of patient formulation and psychiatric diagnosis. Be sure to read this before the upcoming small group discussion one if you don't read it before this lecture. Small group discussion one will give you a chance to practice these concepts. This reading and the accompanying lecture will introduce you to…

I. The patient formulation
II. The five diagnostic axes used in DSM-IV
III. Two patient vignettes and some accompanying discussion questions

A good formulation is practical and useful and sometimes even smacks of a "work of art". A bad formulation, however, has the potential to leave you suspicious that the formulating clinician is a "fuzzy thinker" who is "winging it". In the section that follows, I will try to lay a simple and sensible framework for patient formulations.

The Four P's



I. The Elements of Formulation

"The Four P's" (**p**redisposing/**p**rotective, **p**recipitating, and **p**erpetuating factors) are the basic building blocks of the formulation. To insure your formulation is comprehensive, we recommend that you break each "P" into biological, psychological, and social considerations (figure 1). Breaking them down this far is a somewhat artificial and may cause you to "get lost in the biopsychosocial trees". If that happens, then take a step back so you can once again appreciate the "4-P forest"!

A. **P**redisposing and **P**rotective factors (biological, psychological, and social)

Predisposing factors are the historical and constitutional vulnerabilities that were characteristic of the patient prior to the latest clinically relevant event or illness. Protective factors are essentially "predisposing factors in reverse". Protective factors are the characteristic strengths that can counteract predisposing vulnerabilities.

Predisposing and protective factors precede the onset of the symptoms, signs, and disability. Predisposing factors are aspects of individuals that render them more vulnerable to distress,

physiological arousal, and bothersome signs and symptoms. Predisposing and protective factors are often difficult or impossible to modify at the time of clinical presentation (for example, childhood physical or sexual abuse in an adult or a genetic predisposition to anxiety, depression, or disease). However, there may be approaches to mitigating the influence of predisposing factors or bolstering the impact of protective factors on subsequent risk of symptom onset, symptom persistence, impaired coping, psychosocial distress, and loss of functioning.

Biological predisposition/protection – Elements of biological predisposition/protection include an individual's genetic make-up (note that this is not synonymous with the family history, which is actually a combination of "nature" and "nurture"), past biomedical exposures (e.g., heavy metals, drugs of abuse, prescription and over the counter medications), and past medical and surgical histories.

Psychological predisposition/protection – These are factors that shape an individual's "perspective" such as relevant beliefs and expectations (e.g., "my friendships never last", "men only want me for sex", "people will 'do unto me' unless I 'do unto them' first") as well as predominant defense mechanisms (e.g. denial, repression, displacement, humor, altruism, splitting).

Social predisposition/protection – This is the sum of the patient's lifetime history of interpersonal, organizational, family, group, or societal functioning. For example, what sort of role models was the patient exposed to? How big was the family of origin? How well did the family "work" and what role did the patient tend to play in the family? Is the patient a follower or a leader? Does the patient function well in groups or is he a loner? Do others tend to respect or condescend to the patient? Does he tend to form stable or unstable relationships?

B. **P**recipitating factors (biological, psychological, and social)

A precipitating factor is essentially a "straw that breaks the camel's back." Precipitating factors or events send sufficiently vulnerable individuals into an episode of distress, illness, symptoms, or disability. Precipitating factors may also acutely exacerbate distress, illness/symptom severity, or disability among individuals who are already chronically ill (physically or mentally) but have existed in a 'compensated' status.

Biological precipitants – These are physiological perturbations such as an acute medical problem (e.g., exacerbation of hyperthyroidism), an extreme change of environment (e.g., sudden hot or cold temperatures), initiation of some new medication(s), or an illicit drug binge. For example, a man with congestive heart failure may have an acute panic attack triggered when he forgets to take his diuretic, develops mild pulmonary edema, and becomes noticeably short of breath. In this case, the pulmonary edema precipitates an illness episode. His preexisting congestive heart failure is considered a predisposing biological factor.

Psychological precipitants – These are psychological perturbations ranging from a catastrophic trauma (e.g., sexual assault) that would tax even the most resilient person to a mild stressor that most of us would handle with ease. Someone who is adequately predisposed can react to a seemingly mild psychological precipitant in an exaggerated way because the particular stressor holds internal meaning or exposes a problematic belief or defense mechanism. For example, a young man, whose father left his home without saying goodbye when the young man was 13 (this would be the predisposition – probably partly psychological and partly social) becomes unexplainably sad shortly after he begins a new job working for a man he believes to bear a resemblance to his father. The psychological precipitant in this case is the young man's belief that his new boss resembles his father, a belief that the young man may or may not be consciously aware of. One might hypothesize that the young man is depressed because of the unsupported expectation (a psychological predisposition based on a childhood experience erroneously generalized to his current situation) that this boss will not care about him and eventually 'junk' him, as he perceives that his father once did.

Social precipitants – Social precipitants are perturbations of interpersonal, organizational, family, group, or societal significance. This may include events such as divorce or other broken relationships; change of command in a military unit; socially taboo relationships such as fraternization, incest, or harassment; unsanctioned group behavior such as fighting, criticizing a colleague during medical rounds, military misconduct, or criminal behavior; or catastrophic societal events such as war or terrorism. The example of the young man who believes his new boss looks like his father also has elements of a social precipitant: he has undergone a change in his work status and is probably responding to someone in an occupational position of authority over him as he might have responded

to his father in childhood (note that his father is in an analogous position of authority over his family as his new boss is over his new work "family").

C. **P**erpetuating factors (biological, psychological, and social)

Perpetuating factors are those that sustain or maintain illness, behavior, symptoms, or disability, thereby extending duration and impact. Perpetuating factors are especially important in understanding the course of chronic illness (or the reasons why an acute illness develops into a chronic one). Perpetuating factors are often independent of the circumstances originally precipitating an illness. For example, a person may develop acute stress disorder because of a wartime traumatic experience, but the illness is sustained and becomes chronic post-traumatic stress disorder partly because his war experiences becomes an important way of bonding with other veterans and a mark of virtue and standing within the larger community of war veterans.

Biological perpetuators – These are physiological factors that extend the life of an illness. For example, an alcoholic may remain chronically depressed because of a direct effect of the drug on his central nervous system. Similarly, a man with intermittent atrial fibrillation who suffers with agoraphobia due to a panic attack that occurred many months ago finds his disabling fear of a future panic attack is extended by occasional bouts of tachycardia leading to acute fear when he goes into atrial fibrillation. Another man with chronic obstructive lung disease has recurrent panic attacks that get triggered when he feels short of breath. In this last example, an exacerbation of the lung disease is a biological precipitant while the chronic nature of the lung disease is what perpetuates the panic disorder with agoraphobia. We don't have enough information, but it is possible that the man's lung disease was also a predisposing factor for the original onset of his illness (e.g., he may have misinterpreted his first episode of panic as an exacerbation of chronic lung disease, intensifying the severity of the panic attack itself).

Psychological perpetuators – These are expectations, beliefs, or defense mechanisms that extend the duration of illness. For example, if a housewife believes that her husband will leave her if she shows competence, then disability may become extended to "achieve" and sustain an acceptable level of "incompetence." If a mother thinks a panic attack is likely when she is driving with her children, then she may stay at home, even though her last panic attack was several years ago.

Social perpetuators – Social perpetuators are interpersonal, organizational, family, group, or societal forces that sustain illness. For example, the housewife just above may in fact accurately perceive that her husband will reject her if she is competent (e.g., becomes the family "breadwinner") and her depression is sustained out of a reluctance to endanger the relationship by blossoming in family status. The example previously cited of the war veteran whose illness persists to insure his stature in the community of veterans is yet another description of a social perpetuator.

D. **T**reatment Factors (biological, psychological, and social)

Treatments are a special type of "perpetuating" factor. Treatments, like other perpetuating factors, modify the duration or severity of symptoms, illness, and disability after they have been precipitated. However, instead of prolonging illness, treatments are obviously intended to reduce illness duration. Sometimes, however, treatments may prolong symptoms right along with other perpetuating factors. For example, someone experiencing sexual feelings toward their therapist might not "get better" because the patient perceives that getting better would lead to the end of therapy sessions. Similarly, a patient receiving opioid analgesics for chronic pain may fail to improve because the medication is positively reinforcing the pain and contributing to related disability. As in the previous example, this patient continues to manifest symptoms to avoid the end of treatment.

Biological treatments – Biological treatments used in psychiatry include the pharmacotherapies such as antidepressants and antipsychotics. Other biological therapies include chronotherapy (adjusting diurnal cycle, often through the use of high intensity lighting or "phase shifting" the beginning and end of each day over a period of time) and electroconvulsive therapy (ECT). The goal of the biological therapies is to alter thinking, emotions, and behavior in some predictable and positive way by intervening at the physiological level.

Psychological treatments – Psychological treatments involve short and long term psychotherapies. These include the behavioral therapies, cognitive therapy, psychodynamic therapy, supportive therapy, and so on. The goal of the psychological therapies is to alter thinking, emotions,

and behavior in some predictable and positive way through supervised learning and/or careful examination of existing patterns of thinking, emotions, and behavior.

Social treatments – The goal of social therapies is to alter thinking, emotions, and behavior in some predictable and positive way through intervention at the interpersonal or group level. Examples of social therapies are group, couples, and marital therapies. Other social interventions involve efforts at the family, occupational, or residential level. Examples include welfare benefits, disability compensation, arrangements for shelter, various community services, or military or work-related social programs.

It should be apparent from these examples that our conceptual notion of a "biopsychosocial" formulation suffers from inadequacies. What constitutes the "bio", the "psycho", and "social" elements overlaps extensively and may depend more on your theoretical perspective than what is "true". It is probably best understood that all of these processes are inter-related and overlapping and no one factor (e.g., psychological) ever occurs in the absence of other factors (e.g., biological and social).

II. Putting The Patient Formulation Together

	Biological	Psychological	Social
Predisposing			
Protecting			
Precipitating			
Perpetuating			
Treatments			

Now that you have been introduced to the **4 P's**, the remaining step is to put the components together in a formulation. The primary objective of the formulation is to capture "what is going on" with your patient in an accurate, efficient, and global manner. Think of the formulation as your way of conveying the patient to a listener in a few sentences. What follows is one *formula*tion *formula*.

Formula: *"The patient is an [umpty-dump] year old male/female with a history of [list important predisposing factor(s)]. He/she first sought care [days/weeks/months] ago for [symptoms/disability] seemingly brought about by [precipitating factors]. Since seeking care, Mr. X has been treated effectively with [treatment factors]." AND/OR "Some issues complicating treatment (or sustaining symptoms) are [perpetuating factors]"*

Example One: "Mr. X is a 31 year old married Gulf War veteran retired from the military for chronic pain, depression, and fatigue diagnosed as fibromyalgia, whose father is a disabled Vietnam War veteran with alcohol problems [predisposing factors]. Mr. X presents now in a wheelchair with an exacerbation of fatigue and total body pain the day after a major media report [precipitating factor] about a "possible cause" of Gulf War Syndrome. Mr. X is a member of several veterans' advocacy groups and recently testified in a wheelchair to Congress regarding the severity of his illness and the incompetence of military doctors attempting to treat it [perpetuating factors].

Example Two: "Ms. Y is a 34 year old single woman who was repeatedly abused sexually by her step father from ages 7 to 14 and has had a pattern of impulsive and self-destructive relationships and recurrent

major depressive disorder as an adult [all predisposing factors]. She presented to the emergency room three week ago for symptoms of depression with suicidal ideation precipitated by recent separation for her boyfriend [precipitating factor]. Though she lives alone and has few social supports but has shown an early favorable response to the antidepressant sertraline 150 mg daily and weekly supportive therapy sessions [perpetuating factors and treatments]."

Example Three: "Ms. Z is a 45 year old woman with no prior psychiatric history and a brother with a history of depression [predisposing factor] who presents during a scheduled intake complaining of new depressive symptoms over the past week after her husband of 23 years left her for another woman [precipitating factors]. [There are no perpetuating factors in this example because the symptoms are new]

This series of quick formulations illustrates the general idea behind the patient formulation. You can (and should) elaborate on these simplified formulations as time allows and context of the presentation necessitates.

III. Clinical Diagnosis and the Multiaxial Assessment

The next sections deal with clinical diagnosis. The multiaxial diagnostic system used in psychiatry involves an assessment on several axes, each of which refers to a different domain of information that may help clinicians plan treatment and predict outcome. There are five separate axes included in the DSM-IV multiaxial classification. These are listed in the box below.

AXIS I
Clinical Disorders
Other Conditions That May Be a Focus of Clinical Attention

AXIS II
Personality Disorders
Mental Retardation

AXIS III
General Medical Conditions

AXIS IV
Psychosocial and Environmental Problems

AXIS V
Global Assessment of Functioning

A primary objective behind the use of this multiaxial diagnostic system is to facilitate comprehensive and systematic evaluation with attention to the various mental disorders and general medical conditions, psychosocial and environmental problems, and level of functioning that might be overlooked if the focus was on arriving at a single all encompassing diagnosis. The multiaxial diagnostic system used in psychiatry provides a convenient format for organizing and communicating clinical information, for capturing the complexity of clinical situations, and for describing the individual patient differences among people with the same primary diagnosis. Inaddition, the multiaxial system helps facilitate application of the biopsychosocial model in clinical, educational, and research settings.

The next sections describe each axis in greater detail.

Axis I: Clinical Disorders Other Conditions That May Be a Focus of Clinical Attention

Axis I is for reporting the "clinical disorders." These are essentially all the disorders or conditions listed in DSM-IV except for the Personality Disorders and Mental Retardation (these diagnoses are reported on Axis II). The major groups of disorders reported on Axis I are listed below. Don't worry much about what these disorders represent just yet. You will learn more about most categories in the weeks to come (I've marked the categories below that we will cover during the course with an asterisk). Also reported on Axis I are Other Conditions That May Be a Focus of Clinical Attention. These are not "disorders" but rather situations or life circumstances that sometimes cause people to seek psychiatric care. When an individual has more than one Axis I disorder (something that frequently happens – a situation quite different from nearly all other medical disciplines), all of these should be listed. By convention, you should list the primary diagnosis first (usually the most disabling or serious disorder, the disorder you think is leading to all other disorders, or the disorder accounting for the patient's chief complaint).

If no Axis I disorder is present, the convention is to write, "deferred" under Axis I.

AXIS I
Clinical Disorders
Other Conditions That May Be a Focus of Clinical Attention

Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence (excluding Mental Retardation)
Delirium, Dementia, and Amnestic and Other Cognitive Disorders
Mental Disorders Due to a General Medical Condition
Substance-Related Disorders
Schizophrenia and Other Psychotic Disorders
Mood Disorders
Anxiety Disorders
Somatoform Disorders
Factitious Disorders
Dissociative Disorders
Sexual and Gender Identity Disorders
Eating Disorders
Sleep Disorders
Impulse-Control Disorders Not Elsewhere Classified
Adjustment Disorders
Other Conditions That May Be a Focus of Clinical Attention

Axis II: Personality Disorders & Mental Retardation

Axis II is for reporting Personality Disorders and Mental Retardation. Axis II may also be used to indicate prominent maladaptive personality features and/or defense mechanisms that do not meet the threshold for a Personality Disorder. The listing of Personality Disorders and Mental Retardation on a separate axis ensures that consideration will be given to the possible presence of Personality Disorders and Mental Retardation that might otherwise be overlooked. As on Axis I, if an individual has more than one diagnosis on Axis II, then all diagnoses are listed. The disorders reported on Axis II are listed in the box.

AXIS II
Personality Disorders
Mental Retardation

Paranoid Personality Disorder
Schizoid Personality Disorder
Schizotypal Personality Disorder
Antisocial Personality Disorder
Borderline Personality Disorder
Histrionic Personality Disorder
Narcissistic Personality Disorder
Avoidant Personality Disorder
Dependent Personality Disorder
Obsessive-Compulsive Personality Disorder
Personality Disorder Not Otherwise Specified
Mental Retardation

Axis III: General Medical Conditions

Axis III is used to report medical conditions that are potentially relevant to the understanding and/or management of a person's mental disorder. These conditions are those that are classified outside the "Mental Disorders" section of International Classification of Diseases (ICD-9 or ICD-10). A listing of the broad categories considered under Axis III may be found in the "Axis III" box.

General medical conditions can be related to mental disorders in a variety of ways. In some cases it is clear that the general medical condition is directly etiological to the development or worsening of mental symptoms and that the mechanism for this effect is physiological. When a mental disorder is judged to be a direct physiological consequence of the general medical condition, a Mental Disorder Due to a General Medical Condition should be diagnosed on Axis I and the exacerbating medical condition gets recorded on both Axis I and Axis III. For example, when hypothyroidism is a direct cause of depressive symptoms, the designation on Axis I is 293.83 Mood Disorder Due to Hypothyroidism, With Depressive Features, and the hypothyroidism is listed again and coded on Axis III.

In those instances in which the relationship between the general medical condition and the mental symptoms is insufficiently clear to warrant an Axis I diagnosis of Mental Disorder Due to a General Medical Condition (that is, it is not clear whether the medical condition is physiologically linked to mental symptoms), the appropriate mental disorder (e.g., Major Depressive Disorder) gets listed on Axis I and the medical condition only gets coded on Axis III.

Other times, a medical condition is recorded on Axis III because of its importance for understanding or treatment of the individual with a mental disorder. An Axis I disorder may be a psychological reaction to an Axis III general medical condition (e.g., the development of Adjustment Disorder With Depressed Mood as a reaction to the diagnosis of carcinoma of the breast). Some medical conditions may not be directly related to a mental disorder but nonetheless have important prognostic or treatment implications (e.g., when the diagnosis on Axis I is Major Depressive Disorder and on Axis III is arrhythmia, the choice of pharmacotherapy is influenced by the general medical condition; or when a person with diabetes mellitus is admitted to the hospital for an exacerbation of Schizophrenia and insulin management must be monitored).

If an individual has more than one clinically relevant Axis III diagnosis, all of them should be listed. If no Axis III disorder is present, then write "None" under Axis III. If an Axis III is suspected but unconfirmed, write "deferred" under Axis III while further diagnostic information is gathered.

AXIS III
General Medical Conditions (with ICD-9-CM codes)

Infectious and Parasitic Diseases (001-139)
Neoplasms (140-239)
Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders (240-279)
Diseases of the Blood and Blood-Forming Organs (280-289)
Diseases of the Nervous System and Sense Organs (320-389)
Diseases of the Circulatory System (390-459)
Diseases of the Respiratory System (460-519)
Diseases of the Digestive System (520-579)
Diseases of the Genitourinary System (580-629)
Complications of Pregnancy, Childbirth, and the Puerperium (630-676)
Diseases of the Skin and Subcutaneous Tissue (680-709)
Diseases of the Musculoskeletal System and Connective Tissue (710-739)
Congenital Anomalies (740-759)
Certain Conditions Originating in the Perinatal Period (760-779)
Symptoms, Signs, and Ill-Defined Conditions (780-799)
Injury and Poisoning (800-999)

Axis IV: Psychosocial and Environmental Problems

Axis IV is where assessments of psychosocial and environmental problems that may affect the diagnosis, treatment, and prognosis of mental disorders (Axes I and II) are recorded. A psychosocial or environmental problem may be a negative life event, an environmental difficulty or deficiency, a familial or other interpersonal stressor, an inadequate social support system or personal resources, or another problem relating to the context in which a person's difficulties have developed. So-called positive stressors, such as job promotion, should only get recorded on Axis IV if they constitute or lead to a problem, as when a person is having difficulty adapting to the new situation. In addition to playing a role in the initiation or exacerbation of a mental disorder, psychosocial problems may also develop as a consequence of a person's mental disorder or may constitute problems that merit consideration in the overall management plan.

When a person has multiple psychosocial or environmental problems, the clinician can note as many as are relevant. In general, the clinician only notes those problems that have been present during the year preceding the current evaluation. Sometimes, however, psychosocial and environmental problems occurring prior to the previous year are recorded under Axis IV if they clearly contribute to a mental disorder or have become a focus of treatment (for example, previous combat experiences leading to Post-Traumatic Stress Disorder).

Almost always, psychosocial and environmental problems are indicated on Axis IV. However, if a psychosocial or environmental problem is the primary focus of clinical attention, it is then appropriate to record it on Axis I too, using one of the conditions found under “Other Conditions That May Be a Focus of Clinical Attention” (so-called “v-codes”).

AXIS IV
Psychosocial and Environmental Problems

Problems with primary support group
Problems related to the social environment
Educational problems
Occupational problems
Housing problems
Economic problems
Problems with access to health care services
Problems related to interaction with the legal system/crime
Other psychosocial and environmental problems

For convenience, problems recorded under Axis IV get grouped according to the following categories:

- Problems with primary support group:
  For example, death of a family member; health problems in family; disruption of family by separation, divorce, or estrangement; removal from the home; remarriage of parent; sexual or physical abuse; parental overprotection; neglect of child; inadequate discipline; discord with siblings; birth of a sibling.
- Problems related to the social environment:
  For example, death or loss of friend; inadequate social support; living alone; difficulty with acculturation; discrimination; adjustment to life-cycle transition (such as retirement).
- Educational problems:
  For example, illiteracy; academic problems; discord with teachers or classmates; inadequate school environment.
- Occupational problems:
  For example, unemployment; threat of job loss; stressful work schedule; difficult work conditions; job dissatisfaction; job change; discord with boss or co-workers.
- Housing problems:
  For example, homelessness; inadequate housing; unsafe neighborhood; discord with neighbors or landlord.
- Economic problems:
  For example, extreme poverty; inadequate finances; insufficient welfare support.
- Problems with access to health care services:
  For example, inadequate health care; transportation to health care facilities unavailable; inadequate health insurance.
- Problems related to interaction with the legal system/crime:
  For example, arrest; incarceration; litigation; victim of crime.
- Other psychosocial and environmental problems:
  For example, exposure to disasters, war, other hostilities; discord with nonfamily caregivers such as counselor, social worker, or physician; unavailability of social service agencies.

Axis V: Global Assessment of Functioning

Axis V is for assessing a person's overall level of functioning. This information is useful for planning treatment, measuring the impact of treatment, and predicting outcome. Reporting of overall functioning on Axis V is often done using a measure called the Global Assessment of Functioning (GAF) Scale (see box on the page following this section). The GAF Scale may be particularly useful in tracking the clinical progress of individuals in global terms, using a single measure. The GAF Scale is rated with respect only to psychological,

social, and occupational functioning. The instructions specify, "Do not include impairment in functioning due to physical (or environmental) limitations."

In most instances, ratings on the GAF Scale should be for the current period (i.e., the level of functioning at the time of the evaluation) because ratings of current functioning will generally reflect the need for treatment or care. For patients who are followed over time (e.g., hospitalized patients or those participating in a time limited therapy or treatment program), it is useful to note the GAF Scale rating at different time points (e.g., admission – discharge or time one – time two). When performing a single cross-sectional assessment, the GAF Scale may be rated for another time period besides the present one (e.g., the highest sustained level of functioning during the past year). The GAF Scale is usually reported on Axis V as: "GAF =," followed by the GAF rating from 1 to 100, followed by the time period reflected in the rating in parentheses, for example, "(current)," "(highest level in past year)," or "(at discharge)."

GLOBAL ASSESSMENT OF FUNCTIONING (GAF) SCALE

INSTRUCTIONS: Consider psychological, social, and occupational functioning on a hypothetical continuum of mental health versus mental illness. Do not include impairment in functioning due to physical (or environmental) limitations.

CODE

91-100
Superior functioning in a wide range of activities, life's problems never seem to get out of hand, is sought out by others because of his or her many positive qualities. No symptoms.

81-90
Absent or minimal symptoms (e.g., mild anxiety before an exam), good functioning in all areas, interested and involved in a wide range of activities, socially effective, generally satisfied with life, no more than everyday problems or concerns (e.g., an occasional argument with family members).

71-80
If symptoms are present, they are transient and expectable reactions to psychosocial stressors (e.g., difficulty concentrating after family argument); no more than slight impairment in social, occupational, or school functioning (e.g., temporarily falling behind in schoolwork).

61-70
Some mild symptoms (e.g., depressed mood and mild insomnia) OR some difficulty in social, occupational, or school functioning (e.g., occasional truancy, or theft within the household), but generally functioning pretty well, has some meaningful interpersonal relationships.

51-60
Moderate symptoms (e.g., flat affect and circumstantial speech, occasional panic attacks) OR moderate difficulty in social, occupational, or school functioning (e.g., few friends, conflicts with peers or co-workers).

41-50
Serious symptoms (e.g., suicidal ideation, severe obsess ional rituals, frequent shoplifting) OR any serious impairment in social, occupational, or school functioning (e.g., no friends, unable to keep a job).

31-40
Some impairment in reality testing or communication (e.g., speech is at times illogical, obscure, or irrelevant) OR major impairment in several areas, such as work or school, family relations, judgment, thinking, or mood (e.g., depressed man avoids friends, neglects family, and is unable to work; child frequently beats up younger children, is defiant at home, and is failing at school).

21-30
Behavior is considerably influenced by delusions or hallucinations OR serious impairment in communication or judgment (e.g., sometimes incoherent, acts grossly inappropriately, suicidal preoccupation) OR inability to function in almost all areas (e.g., stays in bed all day; no job, home, or friends).

11-20
Some danger of hurting self or others (e.g., suicide attempts without clear expectation of death; frequently violent; manic excitement) OR occasionally fails to maintain minimal personal hygiene (e.g., smears feces) OR gross impairment in communication (e.g., largely incoherent or mute).

1-10
Persistent danger of severely hurting self or others (e.g., recurrent violence) OR persistent inability to maintain minimal personal hygiene OR serious suicidal act with clear expectation of death.

0
Inadequate information.

EVALUATION, DIAGNOSIS & FORMULATION - SLIDES

LEARNING OBJECTIVES & ISSUES FOR THOUGHT.

1. What is DSM? What important change did DSM-III implement from previous versions?

2. What is "multiaxial assessment"? What does it "do"?

3. Name the five basic axes of DSM-IV psychiatric diagnostic assessment and define each of them.

4. Compare and contrast DSM-IV axis I, II, and III.

5. List the basic categories of psychiatric diagnoses and what axis is should fall under.

6. What is "operationalism"?

7. What is "phenomenology"?

8. What are reliability and validity and how are they relevant to operationalism?

9. Contrast form and function? How does it apply to psychiatric assessment?

10. Know the elements of the psychiatric history.

11. What is malingering and what lesson should it teach us about the medical history?

12. Know the meaning of the bolded terms in Cohen chapter 2

13. Know the broad types of psychological testing and interviewing.

14. Contrast the "disease", dimension, behavior, and life story perspectives. Which ones do you find most clinically relevant? Why?

Slide 1

What is the *Primary Purpose* of Diagnostic Classification?

To improve the health of diseased groups or individuals

Slide 2

Some Other Common Uses

- Third-party payment for care
- Indication of need or care justification
- Forensic assessments (responsibility)
- Administrative dispositions
- Disability compensation

Slide 3

American Psychiatric Association's

Diagnostic & Statistical Manual of Mental Disorders

The standard (and categorical) diagnostic nomenclature currently used in US psychiatry.

Slide 4

Categorical Diagnosis

A 'yes/no' approach to classification that postulates discrete diagnostic entities.

Slide 5

The History of DSM

- 1952: DSM-I -- a response to ICD-6
- 1968: DSM-II -- minor changes to DSM-I
- 1980: DSM-III -- many important changes
  - › explicit diagnostic criteria
  - › atheoretical & phenomenological orientation
  - › multi-axial assessment
- 1987: DSM-III-R -- 'smoothed' some issues
- 1994: DSM-IV -- refined process

Slide 6

DSM-IV
What A Mental Disorder IS

"a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress or disability or with a significantly increased risk of suffering, death, pain, disability, or an important loss of freedom."

Slide 7

DSM-IV Diagnostic Categories

- **Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence**
- **Substance-Related Disorders**
- **Schizophrenia**
- **Mood Disorders**
- **Anxiety Disorders**
- **Somatoform Disorders**
- **Dissociative Disorders**
- Sexual & Gender Identity Disorders
- Sleep Disorders
- **Eating Disorders**
- **Factitious Disorders**
- **Adjustment Disorders**
- Impulse-Control Disorders
- **Personality Disorders**
- Other Conditions That May Be A Focus of Clinical Attention
- **Dementia, Delirium & Cognitive Disorders**

Slide 8

Five Classification Dimensions

- Axis I - Clinical Syndromes
- Axis II - Personality Disorders
Mental Retardation
- Axis III - General Medical Conditions
- Axis IV - Psychosocial & Environmental Problems
- Axis V - Global Assessment of Functioning

Slide 9

DSM-IV Axis I

Clinical Disorders and Other Disorders that may be the Focus of Treatment:

- principal diagnosis listed first
- multiple diagnoses allowed
- no diagnosis (V71.09)
- axis I diagnosis deferred (799.9)

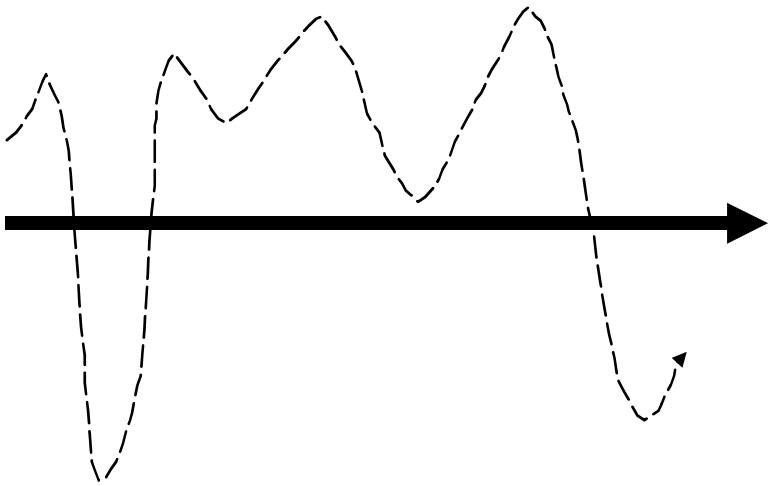
Slide 10

DSM-IV Axis II Personality Disorders

- paranoid
- schizoid
- schizotypal
- antisocial
- borderline
- histrionic
- narcissistic
- avoidant
- dependent
- obsessive-compulsive
- personality “NOS”

Slide 11

Axis I Relationship to Axis II:
Concept of 'State' Versus 'Trait' Symptoms



Slide 12

DSM-IV Axis III
General Medical Conditions

- infectious/parasitic
- neoplasm
- endocrine, nutritional, metabolic, & immunity
- hematological
- neurological
- circulatory
- respiratory
- digestive
- genitourinary
- pregnancy/childbirth
- skin
- musculoskeletal & connective
- congenital anomalies
- perinatal problems
- ill-defined conditions
- injury/poisoning

Slide 13

DSM-IV Axis IV
Psychosocial & Environmental Problems

primary support group problems
social environment problems
educational problems
occupational problems
housing problems
economic problems
problems with access to health care
problems related to legal system/crime

Slide 14

DSM-IV Axis V
Global Assessment of Functioning

- Rates psychological, social, and occupational functioning
- Excludes impairment from physical or environmental limitations
- 'trait' measure of functioning (best in past year)
- 'state' measure of functioning (current)
- suggests that discharge rating be recorded in summaries

Human Behavior Course
2004

SUICIDE

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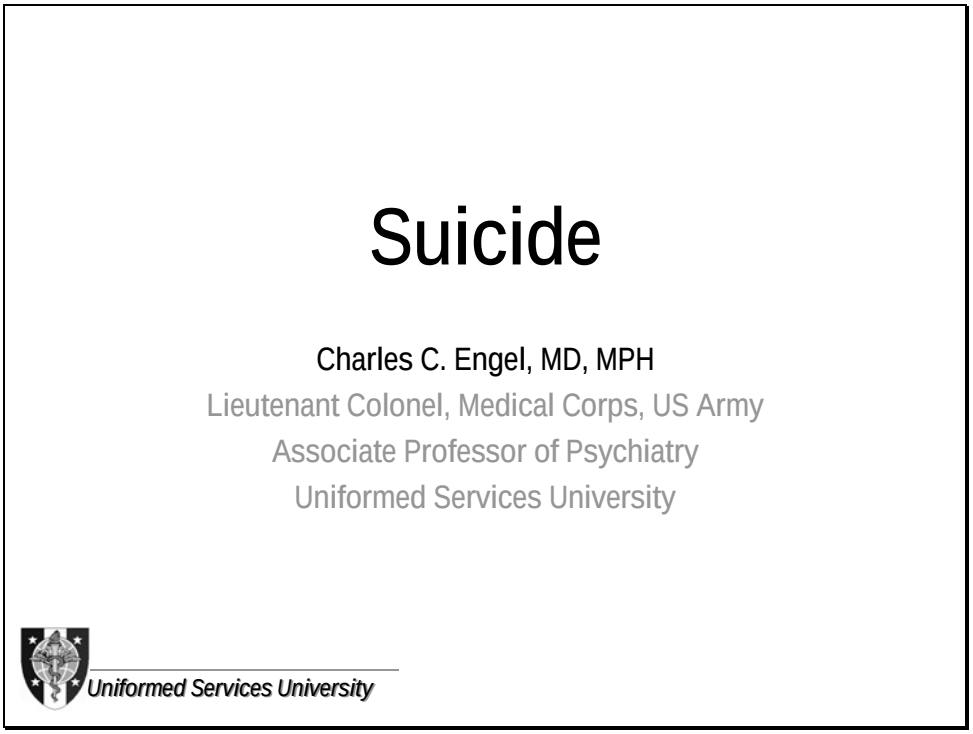
LEARNING OBJECTIVES & ISSUES FOR THOUGHT.

1. Describe basic problems in predicting suicide.
2. List static risk factors for suicide.
3. List dynamic risk factors for suicide.
4. Know what psychiatric diagnoses are most associated with suicide.
5. Compare and contrast suicidal ideation, plan, and intent.
6. What does credibility have to do with suicide risk assessment?

Slide 1



Slide 2

Terms & Concepts

- suicidal ideation
- suicide plan
- suicide intent
- suicide gesture
- suicide attempt
- parasuicide attempt
- suicide precautions
- no-harm contract
- involuntary commitment
- risk-rescue rating
- risk-benefit analysis
- suicide risk reduction
- suicide prediction
- base rate problem
- malingering & disavowals
- dangerousness
- paternalism
- respect for autonomy
- static risk factors
- dynamic risk factors
- command hallucinations
- lethal means
- contingency planning

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Slide 3

Introduction

- definitions
- prediction versus risk reduction
- epidemiology
- risk factors
- associated mental illnesses
- intervention

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Slide 4

Definition & Phenomenology

- Suicide is a behavior with many causes
- Suicide is not a disorder or disease
- 'Suicidal tendency' is not a characteristic trait or personality type

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Slide 5

Magnitude of the Problem

- Occurrence
  - 30,000 per year in US
  - 75 per day or one every 20 minutes
- Doesn't include attempts (ten for each one completed)
- Doesn't include misclassification
  - intentional OD versus medication mistake
  - one car accidents

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Slide 6

Magnitude of the Problem 2

- USA: 12/100,000
  - New Jersey--lowest; Nevada--highest
  - Golden Gate Bridge: 800 since 1937
- Scandinavia/Germany/Japan: 25/100,000
- Spain/Italy/Egypt: <10/100,000

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Slide 7

Prediction Versus Risk Reduction

- Risk factors consistent across many good studies
- Suicide cannot be reliably predicted
- Suicide risk can be reduced
- Task:
  - identify those who can benefit from care
  - destigmatize the care
  - provide the care

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Slide 8

The Base Rate Problem

- US base rate =
  10-12 completed suicides per 100,000 person-years
- 100 fold increased risk =
  1 suicide per 100 person-years
- Actual timing depends on many 'unpredictables' – life events, chance, changes in general health & psychiatric status
- Can't keep people permanently in the hospital
- Involuntary commitment often has adverse effects

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Slide 9

Risk Factors

- Static risk factors
  - demographics
  - psychiatric diagnosis
  - prior attempts (100 fold increase risk)
  - physical illness
  - trait vulnerabilities (personality disorder)
- Dynamic risk factors
  - clinical
  - situational

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Slide 10

Static Risk Factors 2

- Gender
  - completers - male:female = 3:1
  - Attempters - female:male = 4:1
- Age
  - men: peak after 45
  - women: peak after 55
  - 40/100,000 in men > 65
  - elderly: 25% of suicides in 10% of population

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Slide 11

Static Risk Factors 3

- Race
  - 2/3 in US = white males (16.9/100,000)
- Religion
  - Catholics<Protestants<Jews
- Marital Status
  - divorced>single (never married)>married>married w/children

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Slide 12

Static Risk Factors 4

Psychiatric Disorders & Suicide – 90-95 percent of those who complete have at least one:

- ★ Depression: 50-70%
- ★ Schizophrenia: 10-15%
- ★ Alcohol/Drug Dependence: 15-25% of above

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Slide 13

Depressive Disorders

- ★ Major depressive disorder (MDD)
  - 15% of patients with MDD complete suicide
  - males: 400 per 100,000 person-years
  - females 180 per 100,000 person-years
- ★ Psychiatric treatment
  - less than half at time of suicide
  - antidepressant therapy (caution TCAs)
  - ECT for severe depression if present
  - psychotherapy

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Slide 14

Schizophrenia

- 30% attempt & 10% complete suicide
- 4000 completers per year in the US
- 75% of these are young, single, men
- Why?
  - associated with depression (40%)
  - command auditory hallucinations
  - poor social support systems

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Slide 15

Substance Dependence

- Strong association with polysubstance use
- 15% in persons with alcohol dependence
- Between 7,000 and 13,000 per year
- Other Substances
  - cocaine, crack cocaine (crash)
  - IV substances (intentional v. unintentional ODs)
- Personality disorders (antisocial, borderline)
- Associated emotional states (anxiety/depression).

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Slide 16

Dynamic Risk Factors

- Dynamic risk factors (modifiable)
  - clinical risk factors
    - progression (ideas, plan, intent)
    - associated symptom severity
    - associated symptom types (anxiety, depression, hallucinations, delusions, substances, impulsive aggression)
    - therapeutic alliance
  - situational risk factors
    - access
    - social supports
    - occupational status
    - lethal & feasible means

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Slide 17

Dynamic Risk Factors

- Occupation
  - higher SE status = increased risk
  - fall in status = increased risk
- Physicians
  - females: 41/100,000
  - psychiatrists > opthalmologists > anesthesiolgists
  - MDs who commit suicide have mental disorders

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Slide 18

Risk Assessment

- Identify persons at risk
- Careful History & Physical (MSE)
- Past history of attempts
- Ideas (ideation), plan, intent
- Make an appropriate diagnosis

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Slide 19

Risk Assessment: SAD PERSONS

- S.ex (m > f)
- A.ge (old > young)
- D.epressive Disorder
  - S I G E C A P S
- P.revious attempt(s)
- E.mployment status
- R.ecent loss
- S.ingle, divorced
- O.ther substances
- N.o social support
- S.ickness

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Slide 20

Clinical Intervention

- ★ Establish rapport and therapeutic alliance
- ★ Remove access to lethal means
- ★ Get people into treatment
- ★ Address dynamic risk factors
- ★ Activate support systems
- ★ Clinical versus public health intervention

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Slide 21

Risk of suicide and related adverse outcomes after exposure to a suicide prevention programme in the US Air Force: cohort study

Kerry L Knox, David A Litts, G Wayne Talcott, Jill Catalano Feig, Eric D Caine

Abstract

Objective To evaluate the impact of the US Air Force suicide prevention programme on risk of suicide and other outcomes that share underlying risk factors.

Design Cohort study with quasi-experimental design and analysis of cohorts before (1990-6) and after (1997-2002) the intervention.

Participants 5 260 292 US Air Force personnel (around 84% were men).

Intervention A multilayered intervention targeted at reducing risk factors and enhancing factors considered protective. The intervention consisted of removing the stigma of seeking help for a mental health or psychosocial problem, enhancing understanding of mental health, and changing policies and social norms.

Main outcome measures Relative risk reductions (the prevented fraction) for suicide and other outcomes hypothesised to be sensitive to broadly based community prevention efforts, (family violence, accidental death, homicide). Additional outcomes not exclusively associated with suicide were included because of the comprehensiveness of the programme.

Results Implementation of the programme was associated with a sustained decline in the rate of suicide and other adverse outcomes. A 33% relative risk reduction was observed for suicide after the intervention; reductions for other outcomes ranged from 18-54%.

Conclusion A systemic intervention aimed at changing social norms about seeking help and incorporating training in suicide prevention has a considerable impact on promotion of mental health. The impact on adverse outcomes in addition to suicide strengthens the conclusion that the programme was responsible for these reductions in risk.

end of a long road of personal suffering in which multiple indicators of vulnerability pointed to the need for help. They reasoned that this extended period of distress also offered an opportunity for preventive intervention. From their perspective, a responsible suicide prevention programme had to deal with the entire range of afflictions experienced by individuals, families, and their communities.

While many individuals have risk factors, only a few will ever attempt suicide. However, many exhibit decreased functioning, contributing to lost workdays, reduced productivity, great personal suffering, and substantial family distress. The uniqueness of the continuing programme has been its emphasis on early prevention, by intervening at the first signs of dysfunction or distress before the risk of suicide is imminent, while at the same time enhancing the detection and treatment of those at increased danger of taking their own lives. Early population based intervention to prevent suicide has been relatively uncommon. This may be partly due to the pervasive stigma in many cultures surrounding psychosocial or mental health problems, which deters individuals from seeking help.[3-5] These effects are compounded by poor understanding of mental health, defined as "knowledge and beliefs about mental disorders which aid their recognition, management or prevention."[6] Fundamental to the approach taken by the Air Force was the understanding that only through reducing stigma could its community save lives.

During 1995 there were limited prevention efforts in selected groups of the Air Force and the suicide rate remained unacceptably high. In 1996, the Air Force implemented a population based pr
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behavioural and physical adverse events or problems, foremost of

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Program Components

Table 1 US Air Force (USAF) suicide prevention programme and associated policies (Air Force Instructions (AFIs))

Initiatives and mandated policy	Action	Tracking indicators
I Leadership involvement (AFI 44-154 *Suicide and Violence Awareness and Education and Training*)	Leader awareness education and training (squadron commander courses)	Messages from USAF Chief of Staff delivered every 3-6 months to all installation commanders reminding them of importance of suicide prevention and encouraging them to actively promote protective factors, identify risk factors, and encourage personnel not to fear seeking help
II Dealing with suicide through professional military education (AFI 44-154 *Suicide and Violence Awareness and Education and Training*)	Incorporate suicide prevention into professional military education curriculums through required training	Tracking of training, assessment of skills and knowledge of basic suicide and violence risk factors, intervention skills, and referral procedures for people potentially at risk
III Guidelines for commanders: use of mental health services AFPAM 44-160 *The Air Force Suicide Prevention Program*	Improve referrals of active duty members for evaluation of mental health through emphasising that commanders and mental health professionals are partners in improving duty performance	Annual briefings to commanders included resources for referral to mental health, substance abuse, family advocacy, or emergency evaluation (as of 2000, resources accessible through AF website for commanders)
IV Community preventive services (AF Manual 168-696)	Increase preventive functions performed by mental health personnel	Provide one full time equivalent member of staff for community based preventive services at every mental health work centre
V Community education and training (AFI 44-154 *Suicide Prevention Education and Community Training*)	Required training at two levels for non-professionals in basic suicide factors, intervention skills, and referral procedures for people potentially at risk	Non-supervisory "buddy care" training for all personnel and leadership/supervisory training for unit gatekeepers
VI Investigative interview policy (hands-off policy)	Changes in policies to ensure individuals under investigation for legal problems (risk for suicide) are assessed for suicide potential	AF Chief of Staff signed policy letter in 1996; no suicides have resulted since due to agencies failing to comply
VII Critical incident stress management (CISM) (AFI 44-163 *Critical Incident Stress Management*)	Establishment of a multidisciplinary CISM team to respond to traumatic events, including completed suicides	All installations now have multi-disciplinary CISM teams composed of mental health providers, medical providers, and chaplains.
VIII Integrated delivery system (IDS) for human services prevention, chartered as a standing subcommittee of (AF CAIB AFI 90-500 *Community Action Information Boards*)	Establishment of seamless system of services across multidisciplinary human services prevention activities which functions to provide centralised information (I) and referral (R) and collaborative marking of IDS I and R and preventive services	Increase protective factors and decrease behavioural risk factors through eliminating duplication, overlap, and gaps in delivering prevention services. Core membership includes but not limited to family advocacy programme, family support, health promotion/health and wellness centres, mental health clinics, child and youth programmes, and chaplains
IX Limited patient privilege (AFI 44-109 *Mental Health, Confidentiality and Military Law*)	Established psychotherapist-patient privilege for individuals at risk for suicide as means to promote help seeking behaviour	Confidentiality encourages help seeking behaviour, especially in cases undergoing disciplinary action where information revealed to mental health provider is not used in judicial action
X Behavioural health survey	Tool for assessing behavioural health aspects of unit available to any commander	In 1999 survey 73% of commanders reported suicide was top item of interest to understand how to promote behavioural health strengths and respond to needs of their units
XI Suicide event surveillance system	Central surveillance database	Tracks psychological, social, and behavioural risk factors

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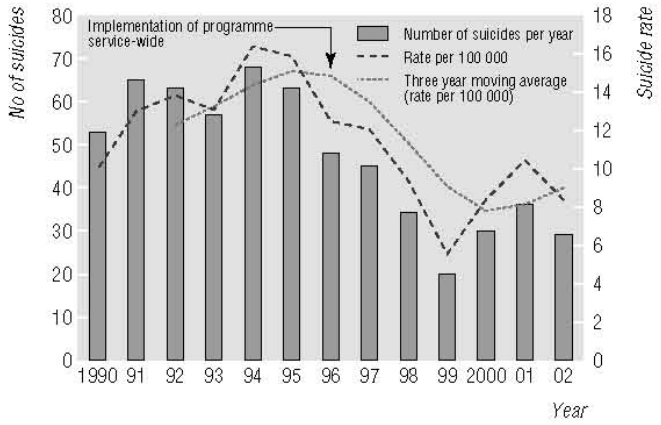

Fig 1 Number of suicides, suicide rates, and three year moving average for rates of suicide, US Air Force, 1990-2002

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Table 3 Comparison of effects of risk for suicide and related adverse outcomes in US Air Force population before (1990-6) and after implementation of programme (1997-2002)

Outcome	Relative risk (95% CI)	Risk reduction (1–relative risk)	Excess risk (relative risk–1)
Suicide	0.67 (0.57 to 0.80)	33%	—
Homicide	0.48 (0.33 to 0.74)	51%	—
Accidental death	0.82 (0.73 to 0.93)	18%	—
Severe family violence	0.46 (0.43 to 0.51)	54%	—
Moderate family violence	0.70 (0.69 to 0.73)	30%	—
Mild family violence	1.18 (1.16 to 1.20)	—	18%

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Summary

Suicide…

- ★ can't be predicted
- ★ risk can be assessed & reduced
- ★ know the risk factors
- ★ make the appropriate diagnosis
- ★ document rationale & risk-benefit assessment
- ★ Intervention – clinical & public health levels

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Human Behavior Course
2004

VIOLENCE

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HUMAN BEHAVIOR COURSE 2004
VIOLENCE - SLIDES

LEARNING OBJECTIVES & ISSUES FOR THOUGHT.

1. Describe the static and dynamic risk factors for violence, homicide, and assault and know what the difference is.

2. What is the difference between predicting violence and assessing risk of violence?

3. Describe the differential diagnosis of violent behavior.

4. Review pertinent elements of the assessment of violence

5. Define, compare and contrast the following terms as they relate to violence:
   A. Likelihood
   B. Magnitude
   C. Imminence
   D. Frequency

6. What is Kluver-Bucy Syndrome?

7. What is intermittent explosive disorder?

8. Describe the "Tarasoff issue"? Is the clinician's duty to warn or to protect? Who? Why?

Slide 1

Violence

- Myth: mentally ill people are violent
- Reality: violent people (criminals) are violent

Slide 2

Associated Illnesses

- Substance Abuse/Dependence
  - intoxication = disinhibition
  - intox or w/drawal may = agitation/paranoia
  - dependence may = requirement for $$
- Personality Disorders
  - environment
  - role models
  - poor coping skills

Slide 3

Associated Risks, cont.

- Psychotic Disorders
  - Schizophrenia
    - paranoia
    - fear
    - command hallucinations
  - Delusional Disorder
    - paranoia
    - fear

Slide 4

Risk Reduction

- Self-protection
  - history from others (witnesses) first
  - trained restraint team/others available
  - stay near door/be alertt
- Prevent harm
  - inform patient that behavior is unacceptable
  - non threatening approach
  - offer medications (BZP, Antipsychotics)
  - call for restraint (training!)

Slide 5

Risk Reduction, cont.

- Assess for Delirium/Psychosis
  - vitals, PE, neuro exam
  - MMSE
- Best Predictor of Future Violence is . . .

Slide 6

Risk Reduction, cont.

- . . . Past history of violence!

- Cause Directs Treatment:
  - delirium: underlying illness
  - psychosis: antispsychotics
  - intoxication: monitored w/drawal and rehab.
  - Other: JAIL!

Conclusions

- Violence
  - mental illness is not the primary cause
  - rule #1 is prevent harm (self, then others)
  - look for substance abuse, psychosis
  - let the Police do their Job

Human Behavior Course
2004

DIAGNOSIS & FORMULATION I

INTRODUCTION TO PATIENT FORMULATION & CLINICAL DIAGNOSIS

SMALL GROUP DISCUSSION ONE

HUMAN BEHAVIOR COURSE 2004
SMALL GROUP 1 – DIAGNOSIS & FORMULATION

If you have not read the section from the syllabus on the biopsychosocial formulation, it is important that you do so before this small group.

LEARNING OBJECTIVES.

1. Define the "four P's" of biopsychosocial formulation. Recognize examples of each.

2. List examples of biological, psychological, and social factors that shape risk, onset, and outcomes associated with psychiatric illness.

3. Review the objectives for the classroom lecture on diagnostic assessment and biopsychosocial formulation. Make sure you have accomplished them.

4. Develop rudimentary skills for writing up and orally presenting a biopsychosocial formulation based on written patient vignettes.

HUMAN BEHAVIOR COURSE 2004
VIGNETTE 1:1 - "MISERY"

An orthopedic surgeon in Seattle requested a psychiatric consultation on Peggy S., a 28-year-old, single, graduate student who was recovering from a recent spinal fusion, because he thought she was not complying with physical therapy.

The psychiatrist noted that Ms. S. was an attractive young woman with a below-the-knee amputation of her left leg. She was oddly ingratiating and cheerful, and didn't seem to be appropriately troubled by her deteriorating medical condition. She reported that 5 years previously she had been thrown to the ground by a boyfriend, injuring her back. Over the next 2 years she had multiple surgical procedures on her back. Finally, a fusion left her pain free until 6 months ago, when she was diagnosed with spinal degenerative changes and was referred for physical therapy.

Amazed that she didn't volunteer any information about her amputation, the psychiatrist asked how it happened and learned that shortly after the original surgery to her back, she had been in a motorcycle accident, sustaining burns to her left ankle. This became a chronic injury and ultimately led to amputation of her leg, a year and a half ago. She reported this calmly and denied any distress over the disfigurement or disability. She also calmly reported that fluctuating swelling of her stump and recurrent ulcers had interfered with her being successfully fitted with a prosthesis. Thus, she had remained in a wheelchair. She had also been hospitalized several times many years earlier for colitis and kidney stones.

The psychiatrist called the surgeon who had performed her amputation. He reported that the original burn had quickly progressed to a chronic injury, with chronic pain and swelling of the left leg. When the leg proved unresponsive to medical management, the patient received a series of skin grafts, all of which failed because of infection and edema. She was instructed to keep her leg elevated, but did not comply, and her leg continued to deteriorate. She saw many doctors, and was followed in a pain clinic, but continued to experience pain, massive edema, and recurrent infections. Ms. S. repeatedly urged her surgeon to amputate her leg, claiming that it was painful and of no use to her. Ultimately he complied.

The surgeon who performed the amputation also reported that Ms. S. had recently had several admissions for left-sided weakness and numbness. Physical findings were inconsistent, the workup was negative, and she was discharged with a diagnosis of "conversion disorder." It was shortly thereafter that her

back pain recurred. The surgeon also commented that various physicians involved in the management of her leg injury had raised the possibility that her symptoms might be self-induced.

Ms. S. is an only child, born to a middle-class family. By her own account, after graduating from college, she moved from job to job for a number of years, generally leaving because of medical problems and repeated hospitalizations. At the time of admission, she was a part-time graduate student, being supported by social security. No one had accompanied her to the hospital, and she had no visitors during her hospitalization. She asked that her doctors not contact her family.

Ms. S. was transferred to an inpatient rehabilitation unit, where she quickly developed a string of largely unexplained medical problems, including a urinary tract infection, gastroenteritis with diarrhea and fever, painful swelling of the right hand and wrist, a rash on her back and torso, and atypical mental status changes, including difficulty doing rudimentary calculations and inconsistent memory deficits. Meanwhile, she repeatedly refused to comply with safety procedures on the unit, leaving her wheelchair unlocked and her bed rail down, despite constant reminders by the staff. Over time she generated a good deal of anger and frustration among most staff members, although a few found her a particularly sad and pathetic case.

After her previous surgeon had been contacted, the staff became suspicious about the role that she might be playing in the development of her symptoms. Ms. S.'s room was searched and furosemide (a diuretic), cathartics, and an exercise band that could serve as a tourniquet were found. These were believed possibly to explain many of her symptoms as well as the unexplained metabolic abnormalities that had been noted in her chart. Careful review of her chart revealed that her urinary tract infection had been diagnosed on the basis of positive cultures in the absence of cells in the urine, most consistent with a fecal contaminant. It remained unclear if or how she might have factitiously elevated her temperature, even while observed, or how she might have induced the bite like lesions on her back and torso.

A team meeting was convened, and Ms. S. was told that it was suspected that she had factitious symptoms, implying that she was actively involved in inducing at least some of her symptoms. She was informed that this is a serious potentially life-threatening mental illness, and that inpatient psychiatric hospitalization was recommended for further evaluation and management. She did not comment on the diagnosis, appeared unconcerned, and agreed to transfer to a psychiatric ward.

Ms. S. was in an acute psychiatric unit for 4 months. During that time she developed no new medical problems and made no complaints of pain or physical discomfort. Instead, she developed a series of psychiatric symptoms. She initially presented with rapid alternations of mood, appearing first hypomanic, racing around the unit in her wheelchair and claiming to be up all night, then depressed, curling up on her bed with the lights out, refusing to eat or interact with others. Her presentation was thought by some staff members to result from factitious Bipolar Disorder, whereas others attributed her symptoms to genuine affective instability or true dissociative phenomena.

Ms. S.'s behavior on the unit was provocative and impulsive. She was labile and suspicious. She split staff, threw tantrums, said she was suicidal, and barricaded herself in her room. She improved on an anticonvulsive medication and an antipsychotic, but nevertheless spent the second half of her hospitalization refusing to participate in activities and with restricted privileges because of her threats of self-destructive behavior if she was allowed to leave the unit.

In psychotherapy, she gradually revealed a history of daily physical abuse at the hands of her parents throughout childhood and early adolescence. Her therapist believed this history was genuine, but other clinical staff remained unconvinced of the veracity of her story of childhood abuse, but were impressed with the chronic and pervasive nature of her poor coping and history of dysfunctional relationships.

Ms. S. agreed to a voluntary transfer to long-term hospitalization. One day before the planned transfer, she changed her mind, saying she wanted to "get on with my life," and submitted a sign-out letter. She went to court, where she was granted discharge by the judge. She signed out against medical advice, and was lost to follow-up.

VIGNETTE 1:1 DISCUSSION QUESTIONS

Questions for Discussion 1:1
This small group will tackle two basic elements psychiatrists use to understand patients, predict their prognosis, and develop appropriate treatment strategies. These two elements are the **multiaxial diagnostic assessment** and the **patient formulation**. This clinical vignette will be used to discuss multiaxial diagnostic assessment as it is described in DSM-IV.

First, let's review the diagnostic axes and assess Ms. S. on each axis using the information we've been given.

1. Axis I:
   A. What diagnostic information is generally recorded on Axis I?

   B. What diagnosis or diagnoses seem most appropriate for Ms. S. on Axis I?

2. Axis II:
   A. Personality disorders and mental retardation are recorded on Axis II when appropriate.
      1) What is a "personality disorder"?

      2) How is a personality disorder different from the type of diagnoses commonly recorded on axis I?

   B. What diagnosis or diagnoses seem most appropriate for Ms. S. on Axis II?

3. Axis III:
   A. What diagnostic information is generally recorded on Axis III?

   B. What diagnosis or diagnoses seem appropriate for Ms. S. on Axis III?

4. Axis IV:
   A. What information is generally recorded on Axis IV?

   B. What information seems appropriate to record for Ms. S. on Axis IV?

5. Axis V:
   A. What information is generally recorded on Axis V?

   B. What information seems appropriate to record for Ms. S. on Axis V?

VIGNETTE 1:2 - "JUNIOR ENLISTEE WITH UNIT PROBLEMS"

Chief Complaint. 21 year-old ADAF E-3 single white man referred for command-requested psychiatric evaluation because he "continually questions orders on the flight line."

History of Present Illness. You are the psychiatrist at Barksdale AFB and receive this request for psychiatric evaluation from this loadmaster's commanding officer. In addition to frequently challenging orders and instructions, he has on occasion refused to obey orders related to loading bombs on B-52s. He sometimes says disrespectful things to his supervisors (e.g., "you're not my father"). He is sometimes late for work, and last week a co-worker reported that he smelled alcohol on the young man's breath when he reported for day shift duty at 0710. He denied daily drinking, but admits to drinking on most days, but "never at work." He has one DUI arrest, on base, about six months ago. He was visibly annoyed at your asking about his alcohol use. He denied any current drug use.

The patient admits to problems with supervisors, and says that a significant portion of the blame is his own--"I know I piss people off and want to stop, but just can't help it sometimes." He goes on to say "but I work with such stupid supervisors." There are apparently no delusions, hallucinations, manic behaviors, physical complaints, memory problems, significant anxiety or panic symptoms, and his sleep is "about as good as it can be with all these shift changes. Why can't they just leave us on one shift?"

Past Medical History. No history of hospitalizations; not followed for any current acute or ongoing medical problems.

Review of Systems. No specific physical complaints in any body system, except "I feel like I have a hangover when I have to change shifts."

Past Psychiatric History. Heavy drinking as per HPI, admits to marijuana use during high school; denies any drug use while in the military. No other history of formal psychiatric evaluation or treatment; he refused his mother's request to "get help" on several occasions.

Family Psychiatric History. History of 3-4 inpatient alcohol treatment programs in father, but no contact with him for several years. No formal psychiatric history in his mother or siblings.

Social History. The workplace is the active flight line at a busy Air Combat Command base. He and his co-workers work in shifts, changing shifts every two weeks. He lives in the dormitory, is mostly a loner, but is sexually active with women--admits to a number of "one-night stands." The patient has two younger sisters, who he says he is close to ("I had to help my mother raise them---I was kinda their protector"). He remains close to his mother, and feels "guilty because she is my mom and deserves better." His mother tells you that "I wish he could change; I really hoped the military could help. I guess nothing can be done for him, huh?"

Personal History. The patient was raised in a family where his father was a severe alcoholic, an authoritarian, and physically abusive to the patient, his siblings, and his mother. The patient's mother left his father when the patient was five years old. He joined the military at his mother's insistence because of frequent run-ins with teachers and law enforcement officials. He had ongoing trouble with skipping school and causing problems for his teachers. There were teenage arrests for shoplifting and racing cars in a dangerous manner. He admits to fighting frequently in junior high and high school, and began smoking cigarettes when he was 13 years old. He began drinking to get drunk when he was 15 years old. He first had sexual intercourse at 14 years old. He said he used drugs in experimental ways (marijuana and cocaine) in high school a few times, but has not used any drugs since he came in the military. Despite his school absences and trouble there, he managed to graduate from high school with a 3.5 grade-point average--he explains this by claiming that he was told by a school counselor that his "IQ is more than 125."

Current Medications. None

Physical Examination. Vital signs normal. Has one tattoo and a few old scars. Otherwise, physical examination normal.

Mental Status Examination. Suspicious at first and angry at having to be evaluated, but became less anxious and more open when talking about wanting help and when talking about his family. No delusions, hallucinations, or suicidal/homicidal ideation. Cognitive examination normal.

VIGNETTE 1:2 DISCUSSION QUESTIONS

Questions for Discussion 1:2

1. Describe the airman's diagnoses using the DSM-IV multiaxial system:
   A. Axis I?

   B. Axis II?

   C. Axis III?

   D. Axis IV?

   E. Axis V?

2. Place this patient's clinical data into a biopsychosocial formulation.
   A. Biological Predispositions

   B. Psychological Predispositions

   C. Social Predispositions

   D. Biological Precipitants

   E. Psychological Precipitants

   F. Social Precipitants

2. What are the predominant issues from your formulation resulting in the signs and symptoms leading to this psychiatric consultation?

3. What strengths (i.e., potential perpetuating factors that are likely to be protective from future problems) does this patient have that might argue against a rapid move to separate him from the military?

4. What negative factors (i.e., potential perpetuating factors that are may well sustain difficulties) suggest that he might not be able to overcome his interpersonal problems soon enough or to the degree necessary to save his military career?